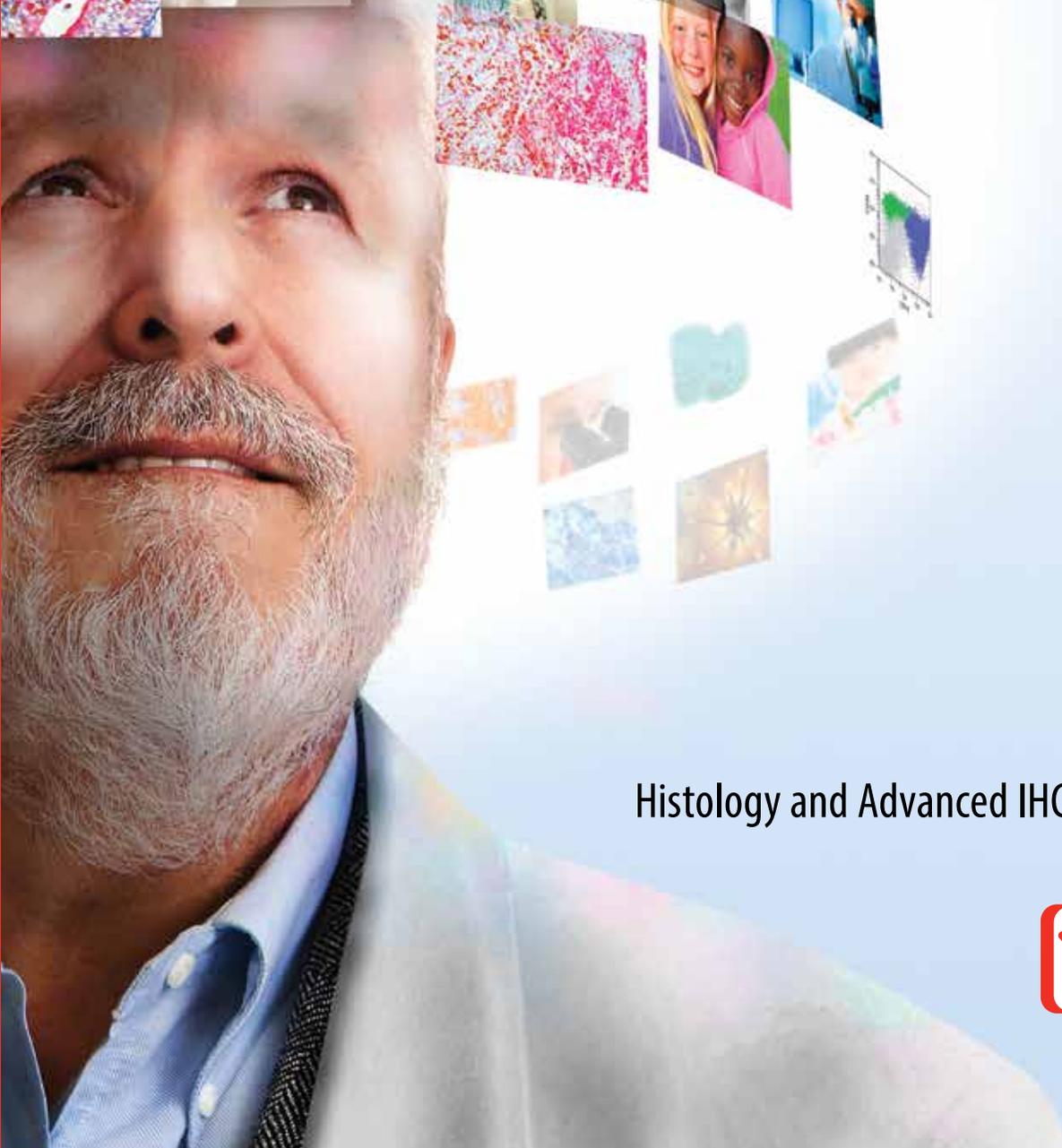


# Diagnostic BioSystems

2013-2014 Anatomic Pathology Catalog



Histology and Advanced IHC Staining Products



**Diagnostic  
BioSystems**

## Ordering Information

### Orders:

Orders will be accepted via phone, fax, mail or e-mail.

Toll Free: (888) 896-3350 Select option 1 for Customer Service

Fax: (925) 484-3390

E-mail: [orders@dbiosys.com](mailto:orders@dbiosys.com)

### Confirming Orders:

To avoid duplicates of your shipment, if a confirmation is sent by e-mail, please clearly mark, "Confirming Order."

### Payment Sources:

Diagnostic BioSystems accepts Visa, Mastercard and American Express.

Clients with approved credit can also pay with wire transfer or check.



### Terms:

Net 30 days upon approval. Overdue accounts are subject to a finance charge of 1.5% per month.

### Prices:

Prices are listed in US dollars. All payments are to be made in US dollars. Prices are subject to change without any notice.

### Freight:

FOB is Pleasanton, CA. Shipping charges will be prepaid and added to invoice.

### Returns:

Products shipped on customer's order will be considered as final sales. If you need to return an item, please call DBS within five working days after receipt of the product for a Return Authorization Number. No credit or exchange will be permitted without prior authorization. Credit or returns for products will be authorized when product performance does not meet the quality stated or products were shipped in error. Product liability limited to refund or replacements only.

### Technical Information:

For technical assistance, please call or fax our technical staff:

Attention: Diagnostic BioSystems Technical Services

Toll Free: (888) 896-3350 Select option 2 for Technical Support

Fax: (925) 484-3390

E-mail: [techsupport@dbiosys.com](mailto:techsupport@dbiosys.com)



Catalog Price: \$2.00 US

Catalog Item No: GMP-M0008-A



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### CATALOG QUICKGUIDE

Find products easily by using this table of contents to identify the relevant product area (Antibody, Detection System etc.) and go to the corresponding page number for the product area. Each section is color coded for ease of use with products listed alphabetically within the section. Products can also be found by using the product index by name in the back of the catalog.

All products are noted with their regulatory designation:

- IVD** In Vitro Diagnostic Use
- ASR** Analyte Specific Reagent
- RUO** Research Use Only

All antibodies contain the following letter designations with protocol recommendations:

- F** = Frozen
- P** = Formalin Fixed Paraffin Embedded
- H** = Heat Induced Pretreatment
- E** = Enzyme Pretreatment

**360** Designates antibodies intended for use with the Montage 360™ System.

# Welcome to Diagnostic BioSystems

Dear Valued Customer,

It has been our pleasure to serve you since 1994. At Diagnostic BioSystems (DBS) we are committed to enhancing Immunohistochemistry test results to support pathologists in making increasingly difficult diagnostic decisions.

We invite you to explore the DBS 2013–2014 catalog including the DBS Montage 360™ System, transforming DBS towards standardizing IHC stains for reproducible results. The DBS Montage MultiPlex™ kits are one example of our new focus on clinically relevant tools for lung cancer diagnosis. Our Montage Routine™ reagents expand our current antibody offering to ready-to-use optimized reagents for use on the Montage 360™ System.

DBS currently engages more than 60 distributors selling the DBS product line around the globe. In 2008, DBS secured cGMP certification for direct sales of IVD labeled products in the United States.

We value your business and thank you for considering DBS for your anatomic pathology products.

Sincerely,



Bipin Gupta PhD  
President & CEO  
Diagnostic BioSystems



## The Diagnostic BioSystems Montage 360™ SYSTEM

### STANDARDIZING IMMUNOHISTOCHEMISTRY STAINING

Diagnostic BioSystems introduces the Montage 360™ System supporting labs by delivering high quality slide staining in every run. This flexible platform allows you to perform both DBS preset protocols or your own protocols with straightforward, easy to use software. ■

#### The DBS Montage 360™ System Staining Platform

- Up to 36 slide capacity instrument accommodates small and large slide runs
- Automated pre-programmed DBS protocols standardizes performance from run to run
- Intuitive Windows™ based programming with 2D barcoding for easy setup

#### The DBS Montage 360™ System Benefits

##### PROVEN IHC STAINING PLATFORM

- The Autostainer™ family of instruments have been delivering reliable IHC results globally for over a decade

##### BROAD CAPABILITIES

- A fully open platform for maximum flexibility to program individual slide IHC protocols
- Supports the DBS Montage MultiPlex™ and Montage Routine™ line of products while simultaneously adapting to your research projects and other custom protocols
- Flexibility in staining software allows optimization of staining volumes and incubations

##### EASY TO PERFORM MULTIPLEX STAINS

- Pre-optimized auto programs for the DBS Montage MultiPlex™ stains ensure consistency from run to run
- Provide all reagents necessary to achieve optimal staining



## DBS Montage 360™ System Ordering Information

PRODUCT NAME	CATALOG NO	PACK SIZE
Montage 360™ Autostainer	AS360-CS (System)	A0500004A (Each)
Montage 360™ Empty Vials	K00029	Each (Pack of 100 Vials)

## DBS Montage 360™ Features

- 1 to 36 slide capacity, each individually programmable
- User-specified protocols and choice of reagents
- Multiple staining runs per day
- Truly hands-free, walk-away operation with advanced timer functions for overnight use
- Easy, Windows\* XP Professional-based programming
- Modular options with up to four units controlled from one PC
- High precision label detector technology for rapid scanning
- Integrated digital bar code scanner
- Fully configured 2D data matrix software and printer interface
- Bar code control of all protocol, reagent, and slide operations
- Pre-printable data matrix labels with user-defined Auto-programs
- Adaptable for proprietary 2D-labeled reagents, or user-defined reagents/labels
- Optional individual inactivation of slide and/or reagent bar coding

## DBS Montage 360™ System—What is Included

- 1 Montage 360™ Instrument Unit
- 3 Slide Racks for 36 Slide Capacity
- 1 Reagent Tray Rack 40 Barcoded Vials
- 1 IBM SFFA50 Computer Hard Drive
- 1 19 Inch Flat Panel Monitor
- 1 HP Color Inkjet Document Printer
- 1 Reagent Tray with Wash Station
- 1 Roll 12 ml Barcode Vials for 2-D
- 1 System Power Strip
- 1 Zebra Reagent and Slide Barcode Label Printer
- 1 Roll Flap Slide Labels (with Ribbon)
- 1 UPS Backup Battery

- 1 Roll Reagent Labels (with Ribbon)
- 4 10 Liter Carboys Containers
- 1 Operators Manual
- 1 Quick Reference Guide
- 1 Cleaning Kit: Brush and Reagents for Automated Cleaning
- 1 Buffer In-Line Tubing Dab Away
- 1 DI Water In-Line Tubing 125 ml Tween 20
- 1 Nontoxic Waste Tube Buffer Bottle
- 1 Toxic Waste Tube
- 1 US Crate 360 with Compartment
- 1 Flap Slide Label Kit (6 X 500)



Visit us at [dbiosys.com](http://dbiosys.com)

## The DBS Montage 360™ System Specifications

<b>Stainer Dimensions</b>	(D x W x H) 26.4 x 30 x 22.8 inches
<b>Weight</b>	119 lbs, 55 kg
<b>Electrical</b>	110 / 120 V 60 Hz
<b>Slide Capacity</b>	1-36 slides / run
<b>Reagent Container Capacity</b>	Up to 40 reagents / run
<b>Reagent Dispense Volume</b>	100ul, 150ul, 200ul, 400ul, 600ul
<b>Operating Temperature</b>	Ambient
<b>Computer Hardware</b>	2 Gz, 128 Mb RAM, 20 Gb Hard Drive, CD-ROM, 19" Flatscreen Monitor
<b>Computer Software</b>	Windows™ Preloaded System Password Protection Software, 2-D Barcode Scanner, Data Export, Dilutions Calculator, Multiple Rinse or Dry Options Per Slide
<b>Printer</b>	Premium Color Deskjet
<b>Waste Disposal</b>	Separate Hazardous and Non Hazardous Waste Receptacles

## DBS Montage 360™ System Warranty & Service

**Extended Warranty:** The DBS Montage 360™ System comes with a one-year warranty from the date of install. Warranty programs are available to provide peace of mind so labor and spare parts are fully covered in case of instrument breakdown.

**Hardware Maintenance:** Standard Hardware Maintenance is carried out by experienced technicians who know your instrument intimately. Your annual service and service certificate will maintain optimum performance of your equipment.

**Software Maintenance:** Ensures that you keep up-to-date with the latest firmware and core application releases to maximize your productivity.



## The Diagnostic BioSystems **Montage MultiPlex™ SYSTEM**

### **DBS HELPS PATHOLOGISTS RESOLVE CLINICALLY RELEVANT QUESTIONS**

Introducing the Montage MultiPlex™ System, a complete kit for staining multiple antibodies on one slide. The resulting multicolor stains help resolve your diagnostic dilemmas and improve the accuracy of diagnosis with all the relevant morphology on one slide.

The Montage MultiPlex™ System is a standardized approach to perform multiple antibody staining on a single slide with all reagents included to perform high quality staining for confidence in diagnosis.

Diagnostic BioSystems range of Montage Lung MultiPlex™ Kits include novel antibody combinations and highly sensitive detection technology. This allows simultaneous testing for morphologically distinct markers, solving complex clinical problems and making interpretation simpler. ■

### **Benefits of DBS Montage MultiPlex™**

#### **COMPREHENSIVE KIT SYSTEMS**

- DBS Montage MultiPlex™ Kits include all reagents needed to perform high-quality staining for confidence in diagnosis
- DBS Montage MultiPlex™ antibodies are optimized to perform on the Montage 360™ System with standardized programs for ideal performance

#### **HIGH PERFORMANCE STAINING REAGENTS**

- Brilliant chromogens allow the precise detection of multiple antigens on the same slide
- DBS Montage Detection Polymer™ delivers high specificity and sensitivity to multiplex stains

#### **PACK SIZE:**

- Ready-to-Use reagents in 50 tests per kit



*standardizing immunohistochemistry MultiPlex staining performance*

 **Montage 360™ SYSTEM**

# M

### Montage MultiPlex™ Lung Adenocarcinoma vs. Mesothelioma (TTF1, CEA, Calretinin, D2-40)

Catalog No.: MPK-001

Regulatory Status: IVD

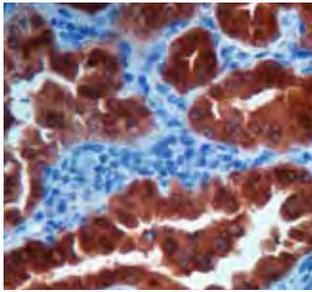


Image shows positive stain for TTF1 and CEA (brown) indicating Lung Adenocarcinoma

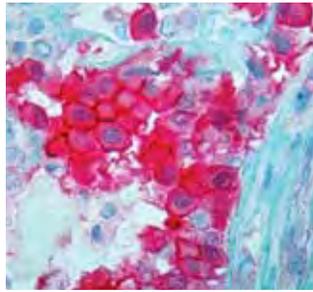


Image shows positive stain for Calretinin and D2-40 (red) indicating Mesothelioma

Differentiates between Lung Adenocarcinoma (TTF1, CEA) and Mesothelioma (Calretinin, D2-40). Cocktail number one consists of TTF1 (Thyroid Transcription Factor 1) and CEA (Carcinoembryonic Antigen). Cocktail number two consists of D2-40 and Calretinin. This Kit will aid in the differentiation of Lung Adenocarcinomas from Mesotheliomas. Studies suggest that TTF-1 and CEA are useful for the identification of Lung Adenocarcinomas and D2-40 and Calretinin will aid in the identification of Mesotheliomas.

### Montage MultiPlex™ Lung Adenocarcinoma vs. Pulmonary Lymphoma (TTF1, Napsin-A, CD45)

Catalog No.: MPK-002

Regulatory Status: IVD

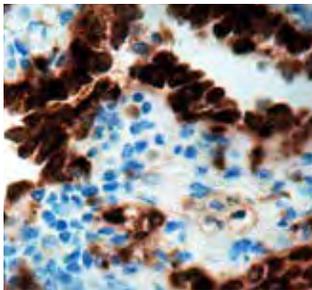


Image shows positive stain for TTF1 and Napsin-A (brown) indicating Lung Adenocarcinoma

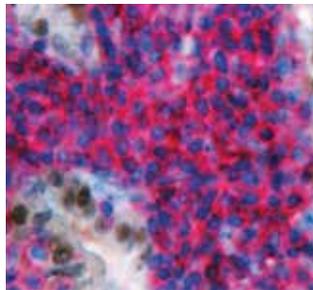


Image shows positive stain for CD45 (red) indicating Lymphoma

Differentiates between Pulmonary Lymphoma (CD45) and Adenocarcinoma (TTF1, Napsin-A). This multiplex kit is a combination of TTF1 plus Napsin-A cocktail and CD45 markers routinely used for the detection of Primary Lung Adenocarcinomas and Lymphomas respectively. TTF1 and Napsin-A cocktail can be used to aid in the identification of Primary Lung Adenocarcinomas. CD45 aids in the differential diagnosis of undifferentiated neoplasms, when Malignant Lymphoma is suspected by the morphological or clinical history.

### Montage MultiPlex™ Lung Adenocarcinoma vs. Tumors of Unknown Origin-Colon Carcinoma (TTF1, CK7, CK20)

Catalog No.: MPK-003

Regulatory Status: IVD

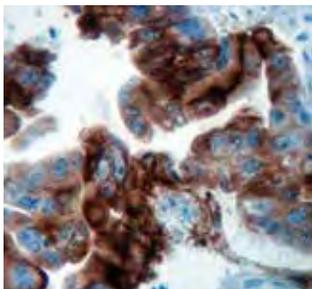


Image shows positive stain for TTF1 and CK7 (brown) indicating Lung Adenocarcinoma

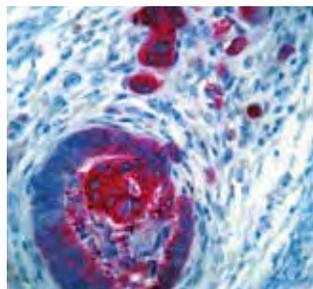


Image shows positive stain for CK20 (red) indicating Colon Carcinoma

Differentiates between Tumors of Unknown Origin-Colon Carcinoma (CK20) versus Lung Adenocarcinoma (TTF1 and CK7). This kit is useful for diagnosis of lung tumors and for the differential diagnosis of Primary Pulmonary Adenocarcinomas from Colon Carcinomas that have metastasized to the lung. This multiplex kit utilizes three antibodies. An antibody cocktail containing TTF1, CK7 and the CK20 markers.

### Montage MultiPlex™ Lung Adenocarcinoma vs. Squamous Cell Carcinoma (TTF1, Napsin-A, CK5/6)

Catalog No.: MPK-004

Regulatory Status: IVD

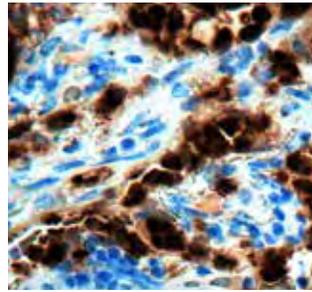


Image shows positive stain for TTF1 and Napsin-A (brown) indicating Lung Adenocarcinoma

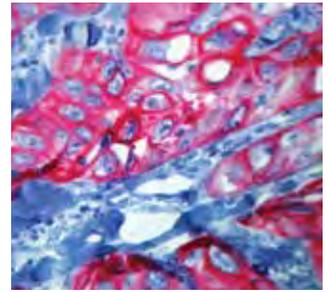


Image shows positive stain for CK5/6 (red) indicating Squamous Cell Carcinoma

Differentiates between Lung Adenocarcinoma (TTF1, Napsin-A) and Squamous Cell Carcinoma (CK5/6). This multiplex kit combines TTF1, Napsin-A cocktail and CK5/6 markers to aid in the differentiation of Lung Adenocarcinomas from Squamous Cell Carcinomas. TTF1 and Napsin-A are often expressed by primary Lung Adenocarcinomas. CK5/6 stains Squamous Cell Carcinomas.

### Montage MultiPlex™ Small Cell Carcinoma vs. Squamous Cell Carcinoma (CD56, Chromogranin A, Synaptophysin, CK5/6)

Catalog No.: MPK-005

Regulatory Status: IVD

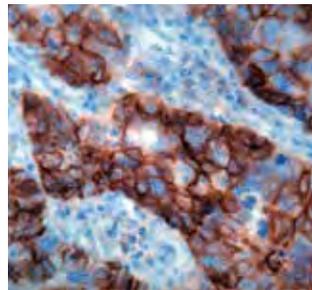


Image shows positive stain for CD56, Chromogranin A and Synaptophysin (brown) indicating Small Cell Carcinoma

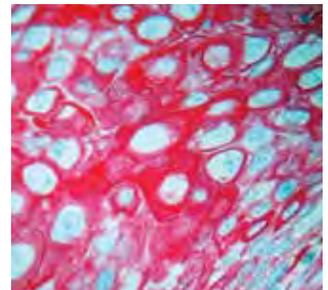


Image shows positive stain for CK5/6 (red) indicating Squamous Cell Carcinoma

Differentiates between Small Cell Carcinoma (CD56, Synaptophysin, and Chromogranin A) and Squamous Cell Carcinoma (CK5/6). CK5/6 is useful in small biopsy specimens where the differential diagnosis includes poorly differentiated Squamous Cell Carcinoma versus Small Cell Carcinomas. This multiplex kit is a combination of CD56, Chromogranin A and Synaptophysin in a cocktail and CK5/6.

### Montage MultiPlex™ Small Cell Carcinoma vs. Pulmonary Lymphoma (CD56, Synaptophysin, Chromogranin A, CD45)

Catalog No.: MPK-006

Regulatory Status: IVD



Image shows positive stain for CD56, Chromogranin A, and Synaptophysin (brown) indicating Small Cell Carcinoma

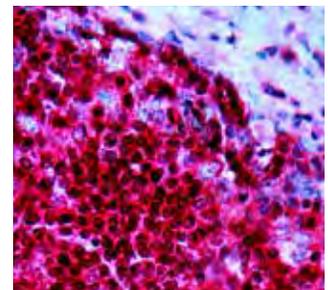


Image shows positive stain for CD45 (red) indicating Lymphoma

Differentiates between Small Cell Carcinoma (CD56, Synaptophysin, and Chromogranin A) and Pulmonary Lymphoma (CD45). This multi-stain aids in the differential diagnosis of Malignant Lymphoma versus Small Cell Carcinoma in undifferentiated neoplasms, when these malignancies are suspected by the morphological or clinical history. The CD56, Synaptophysin, and Chromogranin A cocktail is useful to detect Small Cell Carcinoma and the CD45 antibody is useful in the detection of Malignant Lymphoma.

# Primary Antibodies

DIAGNOSTIC BIOSYSTEMS OFFERS AN ENTIRE RANGE of ready-to-use and concentrated antibodies optimized to provide high quality staining when used for immunohistochemical applications. Our rabbit monoclonal antibodies are also available for enhanced specificity and sharp signal.

We also are pleased to introduce the Montage 360™ line of routine antibodies optimized for use on the automated Montage 360™ System. ■

## FORMAT AND PACK SIZE:

**Concentrated Antibodies:** Designed for individuals who want to have more flexibility in their immunostaining protocols. Each antibody is thoroughly quality control tested to cGMP standards. A recommended dilution factor is provided with each antibody.

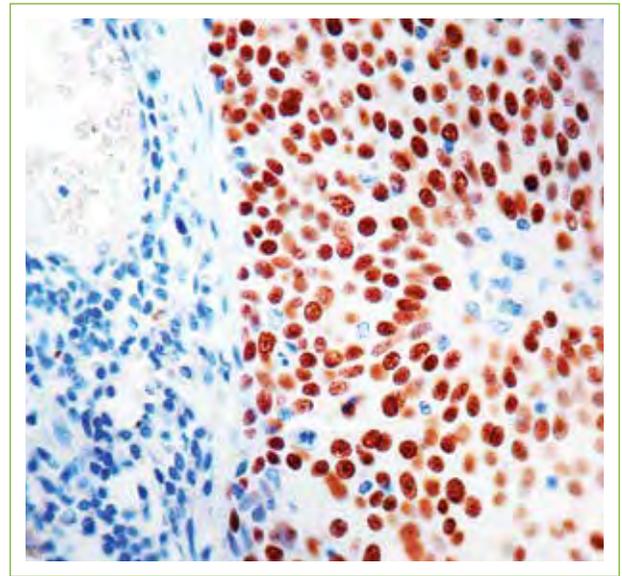
**Pack Size:** Concentrated antibodies are available in 1ml and 0.5ml vials.

**Ready-to-Use Antibodies:** These antibodies have been quality control tested and require no further dilution or titration.

**Pack Size:** Ready-to-use antibodies are available in 6ml vials.

**Montage 360™ Antibodies:** These antibodies have been optimized on the Montage 360™ System and do not need further dilution. We recommend the use of these antibodies on the Montage 360™ System for optimal results.

**Pack Size:** Montage 360™ antibodies are available in 10ml pre barcoded autostainer vials.



Studies suggest that p40 is equivalent in sensitivity, but markedly superior to p63 in specificity, for squamous cell carcinoma. This eliminates the potential pitfall of misinterpreting a p63-positive adenocarcinoma or unsuspected lymphoma as squamous cell carcinoma<sup>1</sup>. The image shows lung squamous cell carcinoma stained with p40 (PDR 055).

## CATALOG NUMBER GUIDE:

The following codes help to identify the antibody source.

CONCENTRATED ANTIBODIES	MONTAGE 360™ ANTIBODIES	READY-TO-USE ANTIBODIES
Mob: Mouse Monoclonal Antibody	PDM: Mouse Monoclonal Antibody	PDM: Mouse Monoclonal Antibody
RMAB: Rabbit Monoclonal Antibody	RMPD: Rabbit Monoclonal Antibody	RMPD: Rabbit Monoclonal Antibody
RP: Rabbit Polyclonal Antibody	PDR: Rabbit Polyclonal	PDR: Rabbit Polyclonal

1) Bishop JA et al, p40 (ΔNp63) is superior to p63 for the diagnosis of pulmonary squamous cell carcinoma. Mod Pathol. 2012 Mar; 25(3):405-15.

Monoclonal Mouse Anti-Human

### $\alpha$ -Actinin, Sarcomeric

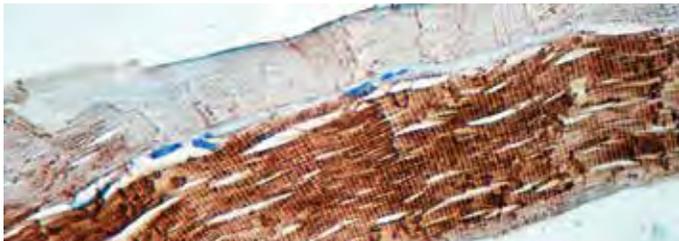
Clone: EA-53

Catalog No.: Mob 227 Concentrated 1ml

Mob 227-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded human skeletal muscle stained with  $\alpha$ -Actinin, Sarcomeric antibody (Mob 227).

Immunogen: Purified rabbit skeletal  $\alpha$ -actinin.

Isotype: IgG1

Positive Control: Skeletal muscle

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific for  $\alpha$ -skeletal muscle actinin and  $\alpha$ -cardiac actinin. It stains Z lines and dots in stress fibers of myotubes in skeletal and cardiac muscle but not in non-sarcomeric muscle elements.

Polyclonal Rabbit Anti-Human

### $\alpha$ -1-Antichymotrypsin

Catalog No.: RP 047 Concentrated 1ml

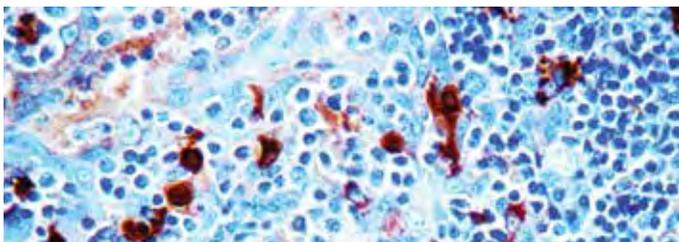
RP 047-05 Concentrated 0.5ml

PDR 023 Prediluted 6ml

PDR023-10RP Prediluted 10ml 360

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded human tonsil stained with  $\alpha$ -1-Antichymotrypsin antibody (RP 047).

Immunogen:  $\alpha$ -1-antichymotrypsin isolated from human serum.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: The antibody is specific against human  $\alpha$ -1-antichymotrypsin. This antibody stains monocytes and macrophages in human tissues and does not stain any other cell type.

Polyclonal Rabbit Anti-Human

### $\alpha$ -1-Antitrypsin

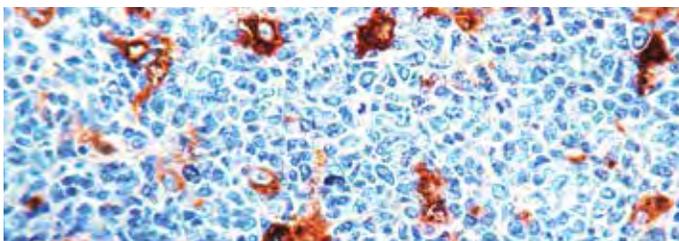
Catalog No.: RP 048 Concentrated 1ml

RP 048-05 Concentrated 0.5ml

PDR 021 Prediluted 6ml

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded human tonsil stained with  $\alpha$ -1-Antitrypsin antibody (RP 048).

Immunogen:  $\alpha$ -1-antitrypsin isolated from human serum.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: The antibody is specific against human  $\alpha$ -1-antitrypsin. This antibody stains macrophages in human tissues and does not stain any other cell type.

Polyclonal Rabbit Anti-Human

### $\alpha$ -1-Fetoprotein (AFP)

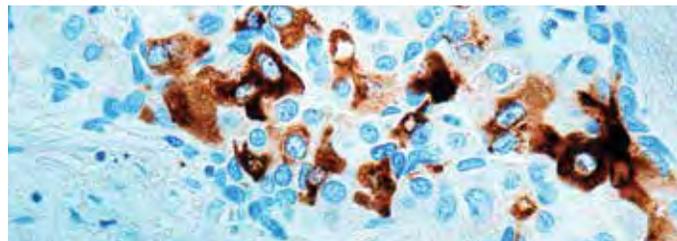
Catalog No.: RP 001 Concentrated 1ml

RP 001-05 Concentrated 0.5ml

PDR 013 Prediluted 6ml

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded human liver hepatocellular carcinoma stained with  $\alpha$ -1-Fetoprotein antibody (RP 001).

Immunogen:  $\alpha$ -1-fetoprotein isolated from human cord serum.

Positive Control: Fetal liver

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with  $\alpha$ -1-fetoprotein. A positive staining in the hepatocytes of fetal tissue was observed. This antibody does not react with any other cell or tissue types.

Monoclonal Mouse Anti-Human

### $\alpha$ -Fetoprotein (AFP)

Clone: C3

Catalog No.: Mob 129 Concentrated 1ml

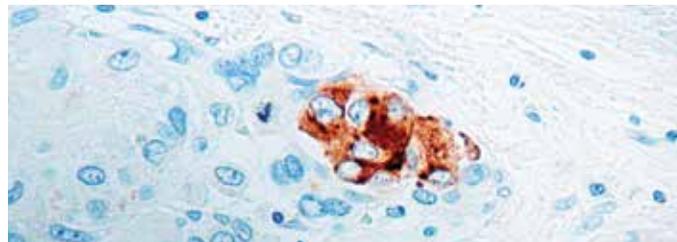
Mob 129-05 Concentrated 0.5ml

PDM 057 Prediluted 6ml

PDM057-10MM Prediluted 10ml 360

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded hepato cellular carcinoma stained with a Fetoprotein antibody (Mob 129).

Immunogen: BALB/C mice were injected with purified human  $\alpha$ -fetoprotein.

Isotype: IgG2a

Positive Control: Fetal liver

Cellular Localization: Cytoplasmic

Specificity:  $\alpha$ -fetoprotein (AFP) is a single chain glycoprotein of 70 kDa that is normally expressed in the fetal liver, gastrointestinal tract and yolk sac. This antibody recognizes an epitope of  $\alpha$ -fetoprotein present in human and several other species.



For more about our Primary Antibodies  
visit us at: [www.dbiosys.com](http://www.dbiosys.com)

Monoclonal Mouse Anti-Human

### Actin, $\alpha$ -Smooth Muscle

Clone: 1A4

F, P

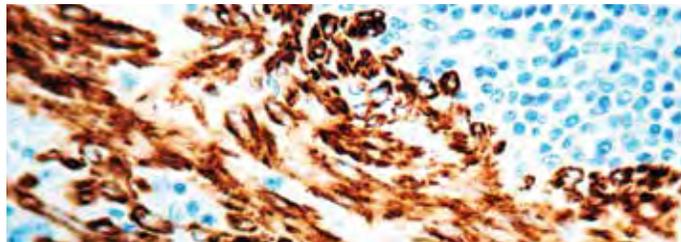
Catalog No.: Mob 001 Concentrated 1ml

Mob 001-05 Concentrated 0.5ml

PDM 003 Prediluted 6ml

PDM003-10MM Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon stained with Actin,  $\alpha$ -Smooth Muscle antibody (Mob 001).

Immunogen: BALB/C mice were injected with N-terminal decapeptide of  $\alpha$ -smooth muscle actin.

Isotype: IgG2a, kappa

Positive Control: Leiomyoma, Colon

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to  $\alpha$ -smooth muscle isoform of actin. It reacts with smooth muscle cells of vessels and different parenchymes. This antibody does not cross-react with  $\beta$  and  $\gamma$ -cytoplasmic,  $\alpha$ -sarcomeric and  $\alpha$ -myocardial actin isoforms.

Monoclonal Mouse Anti-Human

### Actin, Muscle

Clone: HHF35

F, P

Catalog No.: Mob 002 Concentrated 1ml

Mob 002-05 Concentrated 0.5ml

PDM 002 Prediluted 6ml

PDM 002-10MM Prediluted 10m **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human skeletal muscle stained with Actin, muscle antibody (Mob 002).

Immunogen: BALB/C mice were injected with SDS extracted protein from human myocardium.

Isotype: IgG1, kappa

Positive Control: Skeletal muscle

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to  $\alpha$  and  $\gamma$  specific actin isomers from skeletal, cardiac and smooth muscle but does not recognize  $\beta$  and nonsmooth muscle  $\gamma$  actin isomers.

Monoclonal Mouse Anti-Human

### Actin, Pan Muscle

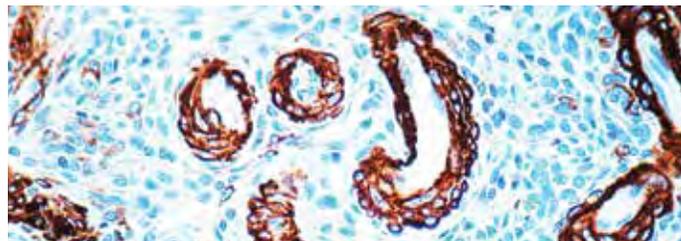
Clone: 1A4 + 5C5

F, P

Catalog No.: Mob 235 Concentrated 1ml

Mob 235-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human uterus leiomyoma stained with Actin, Pan Muscle antibody (Mob 235).

Immunogen: BALB/C mice were injected with N-terminal decapeptide of  $\alpha$ -smooth muscle actin for 1A4 and with purified rabbit striated muscle actin for 5C5.

Isotype: 1A4, IgG2a, kappa; 5C5, IgM

Positive Control: Skeletal muscle, Leiomyoma

Cellular Localization: Cytoplasmic

Specificity: This pan actin is useful in identifying tumors arising from muscle cells, i.e. leiomyosarcoma as well as rhabdomyosarcoma.

Monoclonal Mouse Anti-Human

### Actin, Sarcomeric

Clone: 5C5

F, P

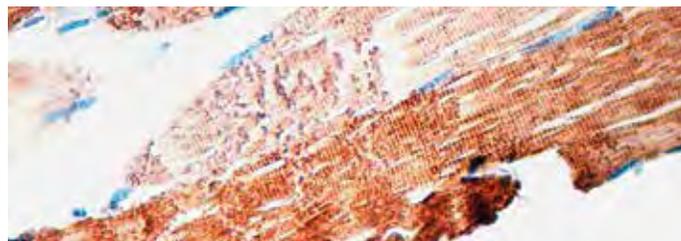
Catalog No.: Mob 128 Concentrated 1ml

Mob 128-05 Concentrated 0.5ml

PDM 099 Prediluted 6ml

PDM099-10MM Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human skeletal muscle stained with Actin Sarcomeric antibody (Mob 128).

Immunogen: BALB/C mice were injected with purified rabbit striated muscle actin.

Isotype: IgM

Positive Control: Skeletal muscle

Cellular Localization: Cytoplasmic

Specificity: Monoclonal anti- $\alpha$ -sarcomeric actin has been used as a marker for rhabdomyosarcoma. This antibody is specific to  $\alpha$ -skeletal and  $\alpha$ -cardiac muscle actins. It does not react with smooth muscle tissue.

Monoclonal Mouse Anti-Human

### Adenovirus

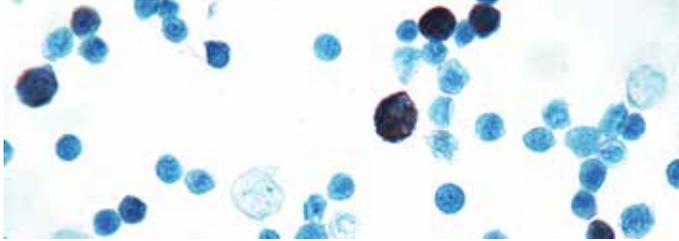
Clone: M58 + M73

Catalog No.: Mob 355 Concentrated 1ml

Mob 355-05 Concentrated 0.5ml

Regulatory Status: ASR

F, P/H



Infected adenovirus cells stained with Adenovirus antibody (Mob 355).

Immunogen: BALB/C mice were injected with adenovirus.

Isotype: M58, IgG2a, kappa; M73, IgG2a, kappa

Positive Control: Adenovirus infected tissue

Cellular Localization: Nuclear

Specificity: This antibody reacts with adenovirus. The adenovirus early gene product E1A is a potent stimulator of cellular proliferation, which when overexpressed can overcome the growth-inhibitory effects of TGF- $\beta$ . The E1A region encodes a series of related proteins (35-46 kDa) with multifunctional capabilities and forms a specific complex with the retinoblastoma tumor suppressor gene product. The E1A and E1B regions together comprise the transforming region of adenovirus. While expression of E1A alone is sufficient to immortalize primary cells, complete transformation requires the additional expression of the E1B region.

Monoclonal Mouse Anti-Human

### Adrenocorticotrophic Hormone (ACTH)

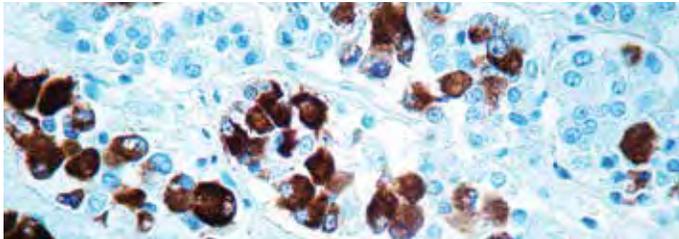
Clone: AH26

Catalog No.: Mob 244 Concentrated 1ml

Mob 244-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded human pituitary stained with ACTH antibody (Mob 244).

Immunogen: BALB/C mice were injected with a synthetic peptide corresponding to amino acids 1-24 from the N-terminal of human ACTH.

Isotype: IgG1

Positive Control: Pituitary

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to an epitope on the N-terminus of ACTH. This antibody stains corticotrophs in the adenohypophysis and is useful in the classification of pituitary adenomas.

Polyclonal Rabbit Anti-Human

### Adrenocorticotrophic Hormone (ACTH)

Catalog No.: RP 045 Concentrated 1ml

RP 045-05 Concentrated 0.5ml

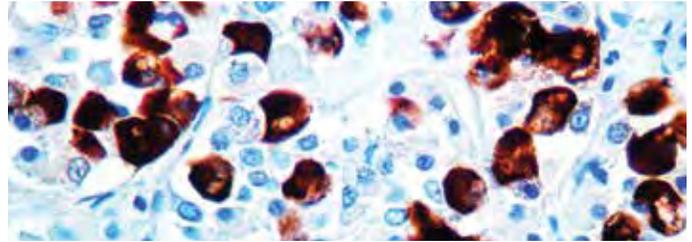
PDR 022 Prediluted 6ml

PDR022-10RP Prediluted 10ml

360

F, P

Regulatory Status: IVD



Formalin fixed paraffin embedded human pituitary stained with ACTH antibody (PDR 022).

Immunogen: Synthetic human ACTH 1-24.

Positive Control: Pituitary

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with human ACTH. This antibody cross-reacts with ACTH in a wide variety of mammalian species. Traces of contaminating antibodies have been removed by solid phase adsorption.

Polyclonal Rabbit Anti-Human

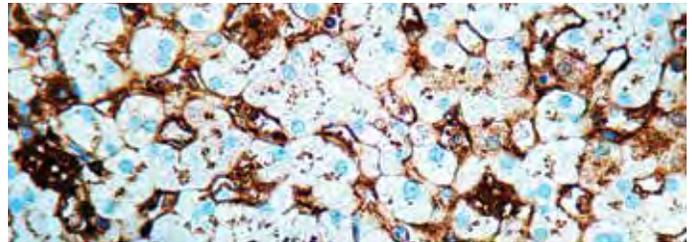
### Albumin

Catalog No.: RP 046 Concentrated 1ml

RP 046-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded human liver stained with Albumin antibody (RP046).

Immunogen: Purified human albumin.

Positive Control: Liver

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with human albumin. This antibody is essentially free of other rabbit serum proteins. Specificity is determined by Ouchterlony double diffusion (ODD) and immunoelectrophoresis (IEP) versus human serum and human albumin.



## Did you know?

The dandelion has been widely used for its medicinal properties and symbolism of hope? At DBS, we want to inspire cancer patients to maintain a spirit of hope as we develop better tools for early cancer diagnosis.

Its botanical name, *Taraxacum officinalis*, is derived from Greek, meaning to alter or stir up. DBS, like the dandelion, is adaptable and tenacious in our efforts to develop innovative solutions for pathologists. ■

Monoclonal Mouse Anti-Human

### Amyloid A Component

F, P

Clone: mcl

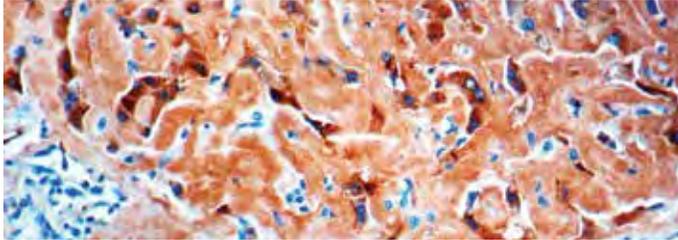
Catalog No.: Mob 003 Concentrated 1ml

Mob 003-05 Concentrated 0.5ml

PDM 118 Prediluted 6ml

PDM118-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human amyloidosis stained with Amyloid A Component antibody (Mob 003).

Immunogen: Human amyloid A protein coupled to horseradish peroxidase and kininogen.

Isotype: IgG2a, kappa

Positive Control: Kidney

Cellular Localization: Extracellular

Specificity: This antibody reacts with amyloid deposits in all organs and tissues. It reacts specifically with amyloid A protein in the native fibrils as well as fixed fibrils but does not show any reactivity with non-amyloid A fibril protein.

Polyclonal Rabbit Anti-Human

### Amyloid Precursor Protein (APP)

F, P/H

Catalog No.: RP 123 Concentrated 1ml

RP 123-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: A synthetic peptide corresponding to C-terminal of human APP.

Positive Control: Brain

Cellular Localization: Cytoplasmic, extracellular

Specificity: This antibody reacts with a 95-100 kDa protein. This antibody recognizes amyloid precursor proteins APP<sub>695</sub>, APP<sub>751</sub>, and APP<sub>770</sub>. Amyloid precursor protein and APP-like proteins are transmembrane glycoproteins with a similar modular domain structure.

Monoclonal Mouse Anti-Human

### β-Amyloid Protein

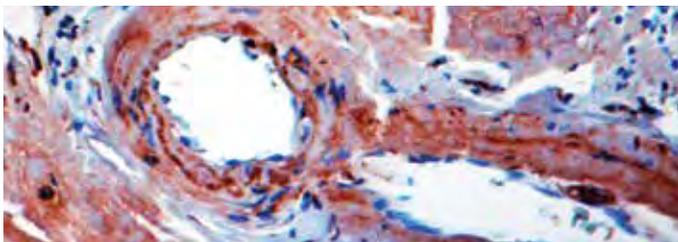
F, P

Clone: BAM-10

Catalog No.: Mob 410 Concentrated 1ml

Mob 410-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded amyloidosis stained with β-Amyloid Protein (Mob 410).

Immunogen: A synthetic β-amyloid peptide (1-40) conjugated to KLH.

Isotype: IgG1

Positive Control: Brain, Amyloidosis

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with β-amyloid protein. This antibody stains amyloid plaques within the cortex, and amyloid deposits in blood vessels. β-amyloid deposits are also detected in Lewy body dementia, Down syndrome, amyloidosis and in Gram-Parkinson dementia complex. The presence of a large number of neuritic plaques (senile) and neurofibrillary tangles in the cerebral cortex is used as a pathological marker for a disease state and presents the major criterion for the diagnosis of Alzheimer's disease at autopsy.

Monoclonal Rabbit Anti-Human

### Anaplastic Lymphoma Kinase (ALK) p80

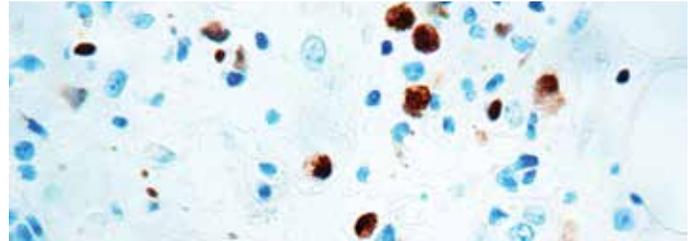
F, P/H

Clone: SP8

Catalog No.: RMAB 007 Concentrated 0.5ml

RMPD 007-05 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human anaplastic lymphoma stained ALK antibody (RMAB 007).

Immunogen: Recombinant protein corresponding to a region, which spans the tyrosine kinase catalytic domain and part of the C-terminus of the NPM-ALK transcript.

Isotype: IgG

Positive Control: Anaplastic Lymphoma

Cellular Localization: Cytoplasmic and/or nuclear

Specificity: This antibody recognizes a human p80 protein, identified as a hybrid of the anaplastic lymphoma kinase (ALK) gene and the nucleophosmin (NPM) gene resulting from the t(2;5)(p23;q35) translocation found in 30-50% of CD30+ large cell lymphomas. This rabbit monoclonal antibody can be used to detect p80 in these lymphomas and may also be used to detect a recently described subtype of large B cell lymphoma, which expresses the full-length ALK protein.

Polyclonal Rabbit Anti-Human

### Anaplastic Lymphoma Kinase (ALK) p80

F, P/H

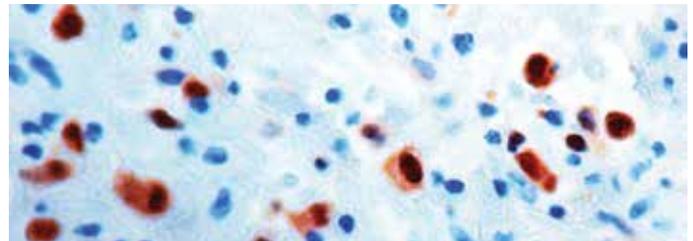
Catalog No.: RP 110 Concentrated 1ml

RP 110-05 Concentrated 0.5ml

PDR 047 Prediluted 6ml

PDR047-10RP Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human anaplastic lymphoma stained with ALK antibody (PDR 047).

Immunogen: Recombinant protein corresponding to a region which spans the tyrosine kinase catalytic domain and part of the C-terminus of the NPM-ALK transcript.

Positive Control: Anaplastic lymphoma

Cellular Localization: Cytoplasmic, nuclear

Specificity: This antibody reacts with a 80 kDa protein. Anaplastic large cell lymphoma (ALCL) is usually composed of large pleomorphic cells. This antibody recognizes a human p80 protein, identified as a hybrid of the anaplastic lymphoma kinase (ALK) gene and the nucleophosmin (NPM) gene resulting from the t(2;5)(p23;q35) translocation found in a third of large cell lymphomas. This antibody can be used to detect p80 in these lymphomas as well as subtype of large B cell lymphoma, which expresses the full length ALK protein.

Monoclonal Mouse Anti-Human

### Androgen Receptor

F, P/H

Clone: AR 441

Catalog No.: Mob 245 Concentrated 1ml

Mob 245-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human prostate stained with Androgen Receptor antibody (Mob 245).

Immunogen: BALB/C mice were injected with a synthetic peptide corresponding to the human androgen receptor.

Isotype: IgG1

Positive Control: Prostate carcinoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to a protein of 110 kDa, identified as androgen receptor. This antibody reacts with full length AR and also with the newly described A form of the receptor. This antibody does not cross-react with estrogen, progesterone or glucocorticoid receptors.

Monoclonal Mouse Anti-Human

### Ataxia Telangiectasia Mutated (ATM)

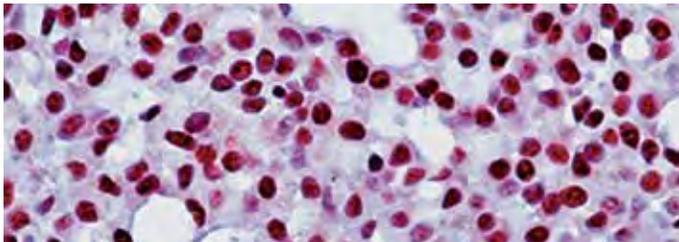
F, P/H

Clone: SYR6D4

Catalog No.: Mob 334-1 Concentrated 1ml

Mob 334-1-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human breast carcinoma stained with ATM antibody (Mob 334-1).

Immunogen: BALB/C mice were injected with synthetic peptide (aa 819-844) of human ATM conjugated to keyhole limpet hemocyanin.

Isotype: IgG1

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: This antibody reacts with a 350 kDa protein known as ATM (Ataxia Telangiectasia Mutated). ATM protein phosphorylates p53 on serine 15 near the N terminus, thereby contributing to the activation and stabilization of p53 during the IR-induced DNA damage response.

Monoclonal Mouse Anti-Human

### BAG-1/RAP46 Protein

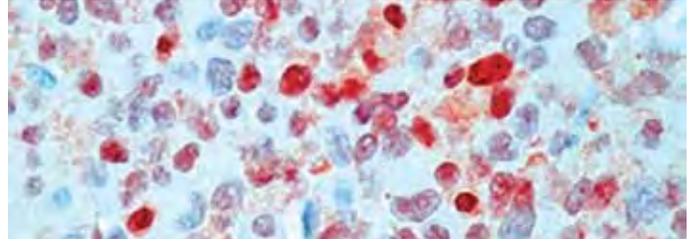
F, P/H

Clone: 3.10G3E2

Catalog No.: Mob 335 Concentrated 1ml

Mob 335-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human breast carcinoma stained with BAG-1 antibody (Mob 335)

Immunogen: BALB/C mice were injected with full length recombinant human BAG-1 protein.

Isotype: IgG1

Positive Control: Breast carcinoma

Cellular Localization: Nuclear, cytoplasmic

Specificity: This antibody reacts with a 36 kDa protein known as BAG-1. BAG-1 is a multifunctional protein, which regulates several cellular processes including cell survival, signal transduction and protein folding. BAG-1 blocks apoptosis and interacts with several types of proteins, including bcl-2 family proteins, the kinase Raf-1, tyrosine kinase growth factor receptors and steroid hormone receptors.

Polyclonal Rabbit Anti-Human

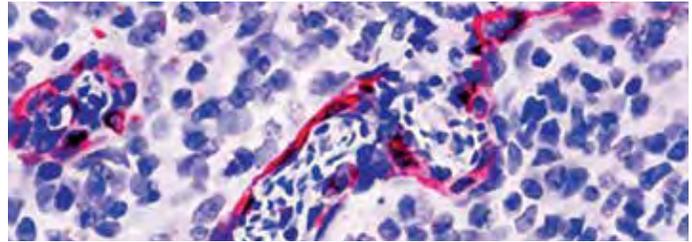
### Bak

F, P/H

Catalog No.: RP 078 Concentrated 1ml

RP 078-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human tonsil stained with Bak antibody (RP 078).

Immunogen: A synthetic peptide derived from the N-terminus of human Bak protein.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 24 kDa protein, known as Bak. Bak is a member of the bcl-2 family of homologous proteins, which function in the regulation of apoptosis. Bak is a 211 amino acids protein, which has been demonstrated to accelerate the rate of apoptosis in growth factor deprived murine lymphoid, neuronal and fibroblastic cell lines.

### Basal Cell Marker

Clone(s): p63: 4A4, HMW-CK: 34βE12



Catalog No.: PDM 174

Regulatory Status: RUO

Immunogen(s): p63: (amino acids 1-205) HMW-CK: solubilized keratin extracted from human stratum corneum.

Isotype(s): p63: IgG2a, HMK-CK: IgG1

Positive Control: Prostatic intraepithelial neoplasia (PIN)

Cellular Localization: p63: Nuclear HMW-CK: Cytoplasmic

Specificity: This antibody cocktail recognizes the p63 protein and HMW cytokeratin. p63 is expressed in normal prostate basal cells. HMW cytokeratins stain stratified epithelia and basal cells.

Monoclonal Mouse Anti-Human

**Bax, Apoptosis Marker**

F, P/H

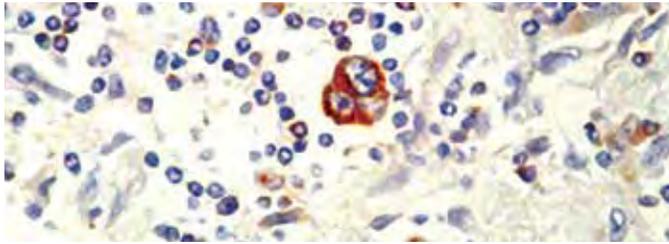
Clone: 2D2

Catalog No.: Mob 246 Concentrated 1ml

Mob 246-05 Concentrated 0.5ml

PDM 103 Prediluted 6ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human Hodgkin lymphoma stained with Bax antibody (Mob 246).

Immunogen: BALB/C mice were injected with a synthetic peptide amino acids 3-16 (Cys-GSGEQPRGGGPTSS) of human bax protein.

Isotype: IgG1

Positive Control: Hodgkin lymphoma

Cellular Localization: Cytoplasmic, cell membrane

Specificity: This antibody recognizes a 211 kDa protein identified as bax protein. This antibody is highly specific to bax and does not cross-react with bcl-2  $\alpha$  or bcl-X protein.

Monoclonal Mouse Anti-Human

**Bcl-2 Oncoprotein**

F, P/H

Clone: 124

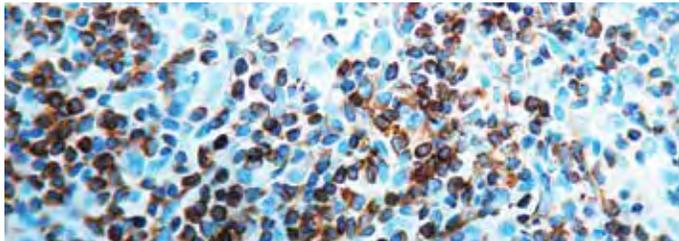
Catalog No.: Mob 005 Concentrated 1ml

Mob 005-05 Concentrated 0.5ml

PDM 016 Prediluted 6ml

PDM016-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Bcl-2 Oncoprotein (PDM 016).

Immunogen: Recombinant bcl-2 peptide sequence comprising of 51-54 amino acids of bcl-2 oncoprotein.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to bcl-2 oncoprotein, encoded by a gene involved in the 14;18 chromosomal translocation. In lymphoid tissues, this antibody stains B lymphocytes as well as T cells.

Monoclonal Mouse Anti-Human

**Bcl-2 Oncoprotein**

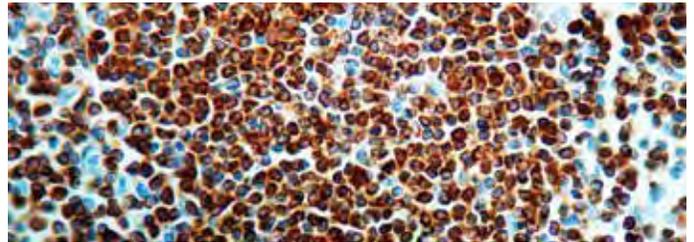
F, P/H

Clone: 100/D5

Catalog No.: Mob 130 Concentrated 1ml

Mob 130-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Bcl-2 Oncoprotein (Mob 130).

Immunogen: BALB/C mice were injected with synthetic bcl-2 peptide.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: The bcl-2 product is considered to act as an inhibitor of apoptosis. Bcl-2 expression is inhibited in germinal centers where apoptosis forms part of the B cell production pathway. Reactive follicles show no staining for bcl-2, whereas the cells in neoplastic follicles exhibit membrane staining. Bcl-2  $\alpha$  oncoprotein has been shown to inhibit apoptosis.

Monoclonal Mouse Anti-Human

**Bcl-6 Oncoprotein**

F, P/H



Clone: LN22

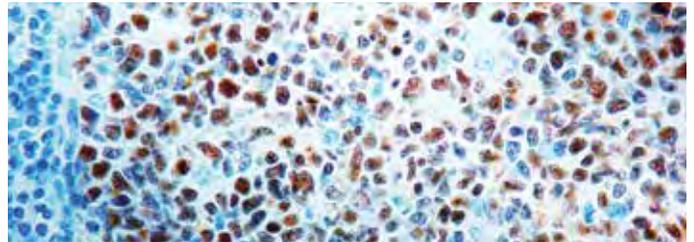
Catalog No.: Mob 468 Concentrated 1ml

Mob 468 Concentrated 0.5 ml

PDM 176 Prediluted 6ml

PDM 176-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Bcl-6 antibody (Mob 468).

Isotype: IgG2b

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: This antibody reacts with the Bcl-6 gene product in follicular lymphomas, diffuse large B cell lymphomas, Burkitt's lymphomas, and in nodular, lymphocyte predominant Hodgkin's disease. Bcl-6 is a proto-oncogene that encodes Kruppel-type Zinc-finger protein of 95 kD and shares homology with transcription factor. Bcl-6 is mainly expressed in normal germinal center B cells and related lymphomas.

Monoclonal Mouse Anti-Human

**Bcl-10**

F, P/H

Clone: 151

Catalog No.: Mob 442 Concentrated 1ml

Mob 442-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Human recombinant Bcl-10

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: Monoclonal anti-bcl-10 reacts specifically with human bcl-10. The epitope recognized by the antibody resides within amino acids 122-168 of human bcl-10 molecule. Bcl-10, also designated as CIPER, mE10, cE10, CARMEN, and CLAP, is an N-terminal CARD (caspase recruitment domain) containing protein. It is a cellular homologue of the equine herpesvirus-2 protein E-10 (vCLAP). Bcl-10 was implicated in the regulation of apoptosis by interacting with caspase 9, enhancing procaspase 9 processing, and triggering its activation when overexpressed in the cell. Bcl-10 cellular overexpression induces JNK, p38, and NF- $\kappa$ B activation. Deregulation of bcl-10 expression was also demonstrated to be involved in cellular oncogenesis.

Polyclonal Rabbit Anti-Human

### **Bcl-X, Apoptosis Marker**

F, P/H

Catalog No.: [RP 126 Concentrated 1ml](#)

[RP 126-05 Concentrated 0.5ml](#)

Regulatory Status: IVD

Immunogen: A synthetic peptide corresponding to aa 46-66 of the human Bcl-X protein.

Positive Control: Hodgkin lymphoma

Cellular Localization: Cytoplasmic, cell/nuclear membrane

Specificity: This antibody reacts with a ~27 kDa protein. Bcl-X is a member of the bcl-2 family of proteins, which function as regulators of apoptosis. Bcl-X has two isomers, Bcl-XL (long) a 241 amino acids protein and Bcl-Xs (short) a 178 amino acid protein lacking a 63 amino acid domain that is well conserved among members of the bcl-2 family.

Monoclonal Mouse Anti-Human

### **Bcl-X, Apoptosis Marker**

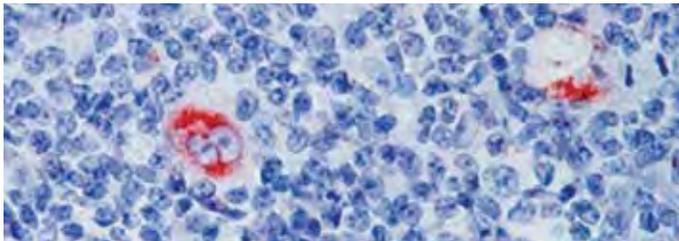
F, P/H

Clone: [2H12](#)

Catalog No.: [Mob 248 Concentrated 1ml](#)

[Mob 248-05 Concentrated 0.5ml](#)

Regulatory Status: IVD



Formalin fixed paraffin embedded Hodgkin lymphoma stained with Bcl-X antibody (Mob 248).

Immunogen: BALB/C mice were injected with a synthetic peptide of amino acid 3-14 (Cys-QSNRELVVDFLS) of human bcl-X protein.

Isotype: IgG2a

Positive Control: Hodgkin lymphoma

Cellular Localization: Cytoplasmic, cell membrane

Specificity: This antibody recognizes a 27 kDa protein identified as bcl-X protein. This antibody is highly specific to bcl-X and does not show cross-reactivity with bcl-2  $\alpha$  or bax protein.

Monoclonal Mouse Anti-Human

### **BOB.1/OBF.1**

F, P/H

Clone: [Wue-AC5](#)

Catalog No.: [Mob 445 Concentrated 1ml](#)

[Mob 445-05 Concentrated 0.5ml](#)

Regulatory Status: RUO

Immunogen: A recombinant BOB.1/OBF.1 protein from C-terminal domain.

Isotype: IgG2a

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: B cell-specific octamer binding protein-1 (BOB-1) is a lymphocyte-specific transcription co-activator protein. B cell-specific transcription is mediated by octamer motifs found in immunoglobulin heavy and light chain gene promoters and in some immunoglobulin enhancers. These sites are bound by the B cell-specific Oct1 and Oct2 transcription factors, and the B-cell restricted co-activator BOB.1/OBF.1. This protein interacts only with the Oct1/2 proteins through sub domains in the POU domain of the Oct1/2 proteins.

Monoclonal Mouse Anti-Human

### **BRCA1**

F, P/H

Clone: [GLK-2](#)

Catalog No.: [Mob 424 Concentrated 1ml](#)

[Mob 424-05 Concentrated 0.5ml](#)

Regulatory Status: RUO

Immunogen: Peptide corresponding to amino acids 1839-1863 of the C-terminus of BRCA1.

Isotype: IgM, kappa

Positive Control: Ovarian carcinoma

Cellular Localization: Cytoplasmic

Specificity: BRCA1 recognizes a 22kDa protein. This antibody stains 94% of ovarian carcinomas with a mutation in exon 11. However, staining was absent in 100% of tumors with mutations other than exon 11.

Monoclonal Mouse Anti-Human

### **CA 19-9**

F, P/H

Clone: [C241:5:1:4](#)

Catalog No.: [Mob 109 Concentrated 1ml](#)

[Mob 109-05 Concentrated 0.5ml](#)

Regulatory Status: IVD

Immunogen: Human colorectal adenocarcinoma cell line COLO 205.

Isotype: IgG1

Positive Control: Colon carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts specifically with sialyl Lewis<sup>a</sup> and recognizes an epitope being designated CA 19-9. It does not cross-reacts with Lewis<sup>a</sup> and Lewis<sup>b</sup>. CA 19-9 has been shown to be useful marker in the diagnosis and management of gastrointestinal cancers.

Monoclonal Mouse Anti-Human

### **CA 125**

F, P/H

Clone: [OV185:1](#)

Catalog No.: [Mob 110 Concentrated 1ml](#)

[Mob 110-05 Concentrated 0.5ml](#)

Regulatory Status: IVD

Immunogen: Partially purified human mucin fraction from a pool of cancer tissues of patients with epithelial ovarian cancer.

Isotype: IgG1

Positive Control: Ovarian carcinoma

Cellular Localization: Extracellular membrane

Specificity: This antibody reacts specifically with CA 125 ovarian cancer antigen. Several studies have shown that CA 125 is a useful tumor marker for ovarian epithelial malignancies. However, CA 125 has been described in other neoplasms such as seminal vesicle and anaplastic lymphomas.

Monoclonal Mouse Anti-Human

### **Cadherin, Pan**

F, P/E

Clone: [CH-19](#)

Catalog No.: [Mob 228 Concentrated 1ml](#)

[Mob 228-05 Concentrated 0.5ml](#)

Regulatory Status: IVD

Immunogen: Synthetic peptide corresponding to the C-terminal amino acids of chicken N-cadherin with extra N-terminal lysine residue.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with pan cadherin with a distinct 135 kDa band from a wide variety of tissues. Cadherins are members of a multigene family of single chain glycoprotein receptors mediating Ca<sup>2+</sup> dependent cell-cell adhesion.

Polyclonal Rabbit Anti-Human

### **Cadherin, Pan**

F, P/H

Catalog No.: [RP 133 Concentrated 1ml](#)

[RP 133-05 Concentrated 0.5ml](#)

Regulatory Status: IVD

Immunogen: A synthetic peptide from the C-terminus of chicken N-cadherin.

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with 120 kDa protein. Cadherins are calcium dependent cell adhesion molecules, which play an important role in the growth and development of cells. In adhesion junctions, cadherins are bound to  $\beta$  and  $\gamma$  catenins, which in turn bind to  $\alpha$  catenin. Cadherins play an important role in tumor invasion and metastasis.

Monoclonal Mouse Anti-Human

**Calbindin-D-28K**

F, P/H/E

Clone: CB-955

Catalog No.: Mob 295-1 Concentrated 1ml

Mob 295-1-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Purified bovine kidney calbindin-D-28K

Isotype: IgG1

Positive Control: Kidney

Cellular Localization: Cytoplasmic, cell membrane

Specificity: This antibody is specific to a protein of 28 kDa. Calbindin-D-28K is also known as vitamin D-dependent calcium-binding protein or cholecalciferin. Calbindin D-28K has a broad tissue distribution; however it exhibits a cell type-specific expression pattern. This antibody reacts specifically with calbindin-D-28K in brain and kidney tissues.

Polyclonal Rabbit Anti-Human

**Calcitonin**

F, P

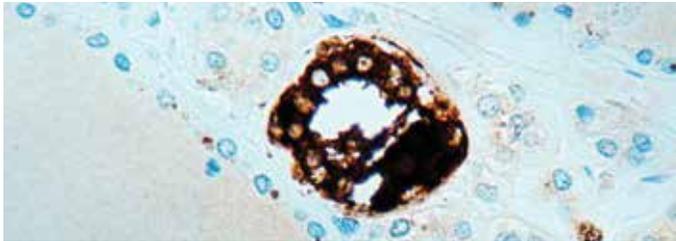
Catalog No.: RP 050 Concentrated 1ml

RP 050-05 Concentrated 0.5ml

PDR 024 Prediluted 6ml

PDR024-10RP Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human thyroid stained with Calcitonin antibody (PDR 024).

Immunogen: Synthetic peptide of human calcitonin corresponding to amino acids 1-32.

Positive Control: Thyroid

Cellular Localization: Cytoplasmic

Specificity: This antibody stains C cells of thyroid.

Monoclonal Rabbit Anti-Human

**Calcitonin**

F, P/H

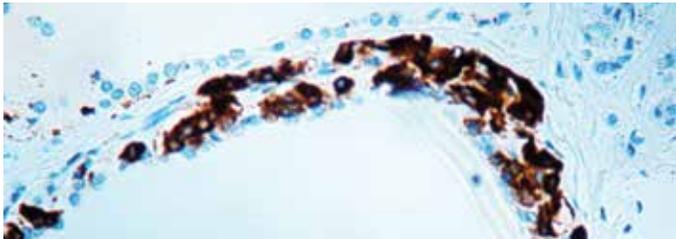
Clone: SP17

Catalog No.: RMAB 009 Concentrated 0.5ml

RMPD 009 Prediluted 6ml

RMPD009-10RM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human thyroid medullary carcinoma stained with Calcitonin antibody (RMAB 009).

Immunogen: Synthetic human calcitonin 1-32 amino acid peptide.

Isotype: IgG

Positive Control: Thyroid or medullary carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes calcitonin, which is a 32 amino acid peptide, which can be demonstrated in C cells of the normal and hyperplastic thyroid. Staining for calcitonin may be used for the identification of a spectrum of C cell proliferative abnormalities ranging from C cell hyperplasia to invasive tumors. Staining for calcitonin in medullary carcinoma of the thyroid produces a fine granular pattern in the cytoplasm. Amyloid deposits within the tumor may also exhibit varying degrees of calcitonin activity.

Monoclonal Mouse Anti-Human

**Caldesmon**

F, P/H



Clone: hHCD

Catalog No.: Mob 316-2 Concentrated 1ml

Mob 316-2-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with human uterus smooth muscle extract.

Isotype: IgG1

Positive Control: Endometrial cancer

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to high molecular weight (120-150 kDa) h-caldesmon. Caldesmon is involved in smooth muscle and non-muscle contraction. Two closely related variants of human caldesmon have been identified. The h-caldesmon variant is predominantly expressed in smooth muscle, whereas l-caldesmon (71-80 kD) is found in non-muscle tissue and cells.

Monoclonal Mouse Anti-Human

**Calponin**

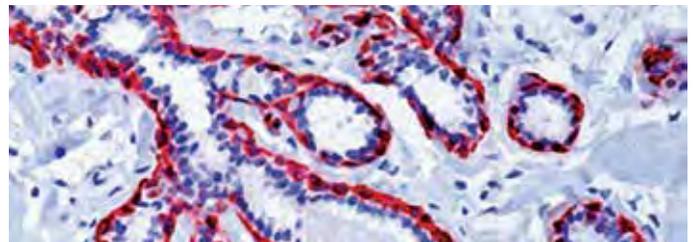
F, P/E

Clone: CALP (same as hCP)

Catalog No.: Mob 345 Concentrated 1ml

Mob 345-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast tissue with Calponin antibody (Mob 345).

Immunogen: BALB/C mice were injected with crude human uterus extract.

Isotype: IgG1

Positive Control: Breast

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 34 kDa protein known as calponin. Calponin, a calmodulin, binds tropomyosin and F-actin and is thought to be involved in the regulation of smooth muscle contraction. Expression of calponin is restricted to smooth muscle cells. Two isoforms of calponin exist whose molecular weights are 34 kD and 29 kDa. 29 kDa isoform is primarily restricted to the muscle of the urogenital tract.

Polyclonal Rabbit Anti-Human

**Calretinin**

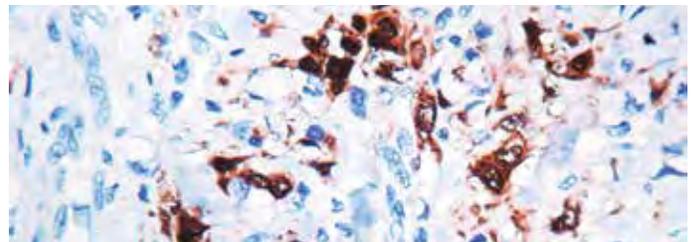
F, P/H

Catalog No.: RP 043 Concentrated 1ml

RP 043-05 Concentrated 0.5ml

PDR 044 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human mesothelioma stained with Calretinin antibody (PDR 044).

Immunogen: Recombinant full length mouse calretinin protein.

Positive Control: Mesothelioma

Cellular Localization: Cytoplasmic

Specificity: The antibody is specific against a calcium binding protein called calretinin. This antibody reacts specifically with calretinin in tissue originating from human. Calretinin is an intracellular calcium-binding protein belonging to the troponin C superfamily. Calretinin has been detected in mesotheliomas and some pulmonary adenocarcinomas.

Monoclonal Rabbit Anti-Human

### Calretinin

Clone: SP13

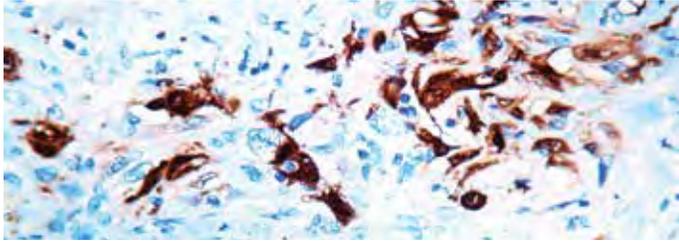
Catalog No.: RMAB 010 Concentrated 0.5ml

RMPD 010 Prediluted 6ml

RMAB010-10RM Prediluted 10ml **3 6 0**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human mesothelioma stained with Calretinin antibody (RMAB 010).

Immunogen: Recombinant full-length mouse calretinin protein.

Isotype: IgG

Positive Control: Mesothelioma

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes a 31.5 kDa protein named calretinin. Calretinin is an intracellular calcium-binding protein belonging to the troponin C superfamily characterized by a structural motif described as the EF-hand domain. The immunohistochemical detection of calretinin in developing cerebellum is restricted to the later stages indicated by weak staining from week 21 of gestation in Purkinje and basket cells and in neurons of the dentate nucleus. The intensity of staining increases as the cerebellum matures. In tumors, calretinin has been detected in mesotheliomas and some pulmonary adenocarcinomas.

Monoclonal Mouse Anti-Human

### Calretinin

Clone: 5A5

Catalog No.: Mob 298-1 Concentrated 1ml

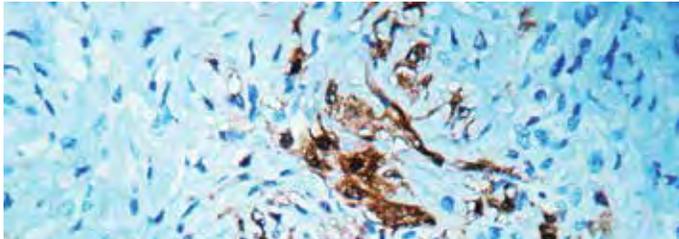
Mob 298-1-05 Concentrated 0.5ml

PDM 133-1 Prediluted 6ml

PDM133-1-10MM Prediluted 10ml **3 6 0**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human mesothelioma stained with Calretinin (Mob 298).

Immunogen: Recombinant full length mouse calretinin protein.

Isotype: IgG1

Positive Control: Mesothelioma, colon

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 31.5 kDa protein. Calretinin is an intracellular calcium-binding protein belonging to the troponin C superfamily. Calretinin is predominately in the cytoplasm but may also be detected in the nucleus of some neurons in the CNS and peripheral nerves, Leydig cells of the testis, kidney tubules, with weak staining in cortical cells of the adrenal gland. In the developing cerebellum, calretinin shows weak staining from 21 week of gestation with staining intensity increasing as the cerebellum matures. Calretinin can be detected in mesothelioma and some pulmonary adenocarcinomas.

Monoclonal Mouse Anti-Human

### CAM 5.2

Catalog No.: Mob 469 Concentrated 1ml

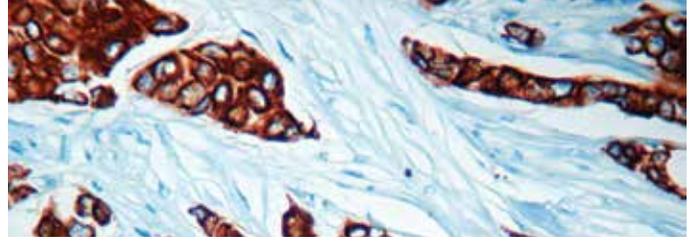
Mob 469-05 Concentrated 0.5 ml

PDM 181 Prediluted 6ml

PDM181-10MM Prediluted 10ml **3 6 0**

NEW

Regulatory Status: IVD



Formalin fixed Paraffin embedded human breast tissue stained with Cam 5.2 (Mob 469).

Immunogen: Anti-Cytokeratin, clone CAM 5.2, is derived from hybridization of mouse P3/NS-1/1-Ag4-1 myeloma cells with spleen cells from BALB/c mice immunized with the human colorectal carcinoma cell line HT29.

Clone: CAM 5.2

Isotype: IgG2a

Positive Control: Lung, colon, prostate and breast tissue.

Cellular Localization: Cytoplasmic.

Specificity: Anti-Cytokeratin (CAM 5.2) reagent has a primary reactivity with human keratin proteins that correspond to Moll's peptides #7 and #8, Mr 48 and 52 kilodaltons (kd), respectively. Cytokeratin 7 and 8 are present on secretory epithelia of normal human tissue but not on stratified squamous epithelium. Anti-Cytokeratin (CAM 5.2) stains most epithelial-derived tissue, including liver, renal tubular epithelium, and hepatocellular and renal cell carcinomas. Anti-Cytokeratin (CAM 5.2) might not react with some squamous cell carcinomas.

Polyclonal Rabbit Anti-Human

### Carcinoembryonic Antigen (CEA)

F, P

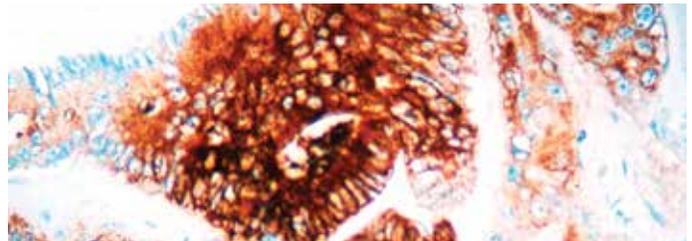
Catalog No.: RP 003 Concentrated 1ml

RP 003-05 Concentrated 0.5ml

PDR 025 Prediluted 6ml

PDR025-10RP Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon carcinoma stained with CEA antibody (PDR 025).

Immunogen: Human CEA isolated from hepatic metastasis of colon adenocarcinoma.

Positive Control: Colon carcinoma

Cellular Localization: Cytoplasmic, luminal membrane

Specificity: This antibody reacts with CEA and CEA-like protein, e.g. NCA, NCA2 and BGP1. In colon adenocarcinoma, this antibody stains the luminal part of enterocytes. The antibody shows positive staining in breast, lung, liver and spleen tissues.

Monoclonal Mouse Anti-Human

**Carcinoembryonic Antigen (CEA)** F, P

Clone: COL-1

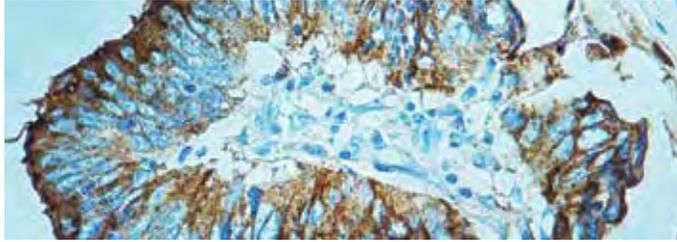
Catalog No.: Mob 008 Concentrated 1ml

Mob 008-05 Concentrated 0.5ml

PDM 005 Prediluted 6ml

PDM005-10MM Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon stained with CEA antibody (Mob 008).

Immunogen: BALB/C mice were injected with extract of colon carcinoma cells.

Isotype: IgG2a, kappa

Positive Control: Colon Carcinoma

Cellular Localization: Cytoplasmic and luminal membrane

Specificity: This antibody is a member of a family of complex antigens, which also includes non-specific cross-reacting antigens (NCA). This antibody stains specific regions of CEA. It reacts with colorectal adenocarcinomas but does not show any staining with polymorphonuclear neutrophils and erythrocytes.

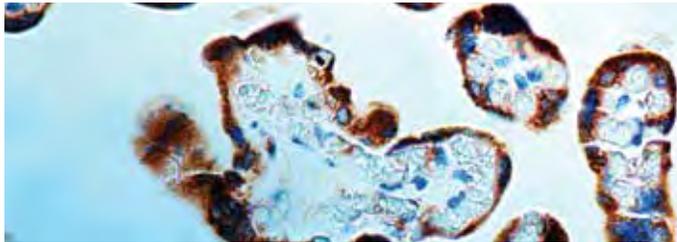
Polyclonal Rabbit Anti-Human

**Caspase 1/ Interleukin-1-β Converting Enzyme** F, P/H

Catalog No.: RP 064 Concentrated 1ml

RP 064-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human placenta stained with Caspase 1 antibody (RP 064).

Immunogen: A synthetic peptide from the second quarter of human Caspase 1 protein.

Positive Control: Placenta

Cellular Localization: Nuclear, cell membrane

Specificity: This antibody reacts with a 45 kDa protein, caspase 1 and is expressed as a proenzyme in many tissues. Active Caspase 1 is a tetramer of two subunits p10 and p20 in 2:2 ratio. Overexpression of caspase 1 can induce apoptosis in fibroblast, which can be inhibited by overexpression of Crm A, a protein from pox virus.



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Monoclonal Mouse Anti-Human

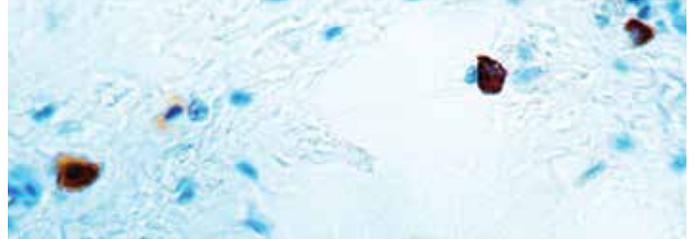
**Caspase 3** F, P/H

Clone: 3CSP03

Catalog No.: Mob 309 Concentrated 1ml

Mob 309-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human tonsil stained with Caspase 3 antibody (Mob 309).

Immunogen: BALB/C mice were injected with recombinant full length human caspase 3 protein.

Isotype: IgG2a

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to a 32 kDa protein, which is identified as Caspase 3. Caspase 3 is associated with induction of apoptosis. Caspase 3 is ubiquitously expressed and is synthesized as an inactive proenzyme.

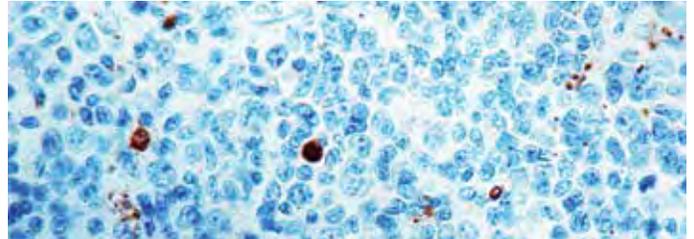
Polyclonal Rabbit Anti-Human

**Caspase 3/ CPP32** F, P/H

Catalog No.: RP 096 Concentrated 1ml

RP 096-05 Concentrated .05ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human tonsil stained with Caspase 3 antibody (RP 096).

Immunogen: Recombinant full-length human caspase 3 protein.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic, some nuclear

Specificity: This antibody reacts with a 32 kDa protein. Caspase 3 is a member of the interleukin-1 β-converting enzyme family. Caspase 3 is thought to be associated with induction of apoptosis. Caspase 3 is synthesized as inactive 32 kDa proenzyme and is processed during apoptosis generating two subunits of 17 kDa and 12 kDa. Caspase 3 stains the epithelial cells of skin, renal proximal tubules and collecting ducts.

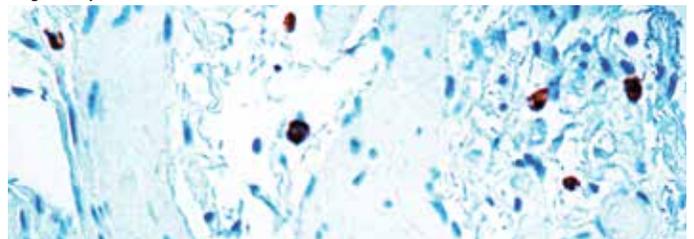
Polyclonal Rabbit Anti-Human

**Caspase 8/ FLICE** F, P/H

Catalog No.: RP 097 Concentrated 1ml

RP 097-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human stomach stained with Caspase 8 antibody (RP 097).

Immunogen: Recombinant full-length human caspase 8 protein.

Positive Control: Stomach

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 55 kDa protein. Caspase 8 has an N-terminal domain with sequence homology to the death effector domain (DED) of FADD. Caspase 8 binds to DED of FADD. Caspase 8 is activated by association with Fas/FADD death-inducing signaling complex to release two active subunits, p18 and p10 into the cytosol, where they activate other caspases amplifying the apoptotic signal.

Polyclonal Rabbit Anti-Human

### Catenin, $\alpha$

F, P/H

Catalog No.: RP 079 Concentrated 1ml  
RP 079-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: A synthetic peptide derived from the C-terminus of human  $\alpha$ -catenin protein.

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic, cell membrane

Specificity: This antibody reacts with a 102 kDa protein, known as  $\alpha$ -catenin. The catenins ( $\alpha$ ,  $\beta$  and  $\gamma$ ) are ubiquitously expressed cytoplasmic proteins, which are associated with E-cadherin.  $\alpha$ -catenin can also bind to P-cadherin and N-cadherin. Cadherin/catenin complexes are linked to the cytoskeleton via a direct association between  $\alpha$ -actinin and  $\alpha$ -catenin.

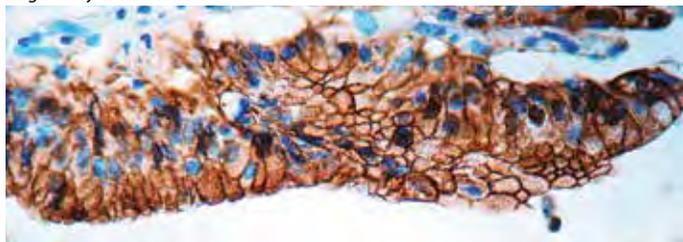
Polyclonal Rabbit Anti-Human

### Catenin, $\beta$

F, P/H

Catalog No.: RP 080 Concentrated 1ml  
RP 080-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human large intestine stained with Catenin  $\beta$  antibody (RP 080).

Immunogen: A synthetic peptide derived from the C-terminus of human  $\beta$ -catenin protein.

Positive Control: Breast carcinoma, Large intestine

Cellular Localization: Cytoplasmic, cell membrane

Specificity: This antibody reacts with a 92 kDa protein, known as  $\beta$ -catenin. The catenins ( $\alpha$ ,  $\beta$  and  $\gamma$ ) are ubiquitously expressed cytoplasmic proteins, which are associated with E-cadherin.  $\beta$ -catenin can also bind to APC. Cadherin/catenin complexes are linked to the cytoskeleton via a direct association between  $\alpha$ -actinin and  $\alpha$ -catenin.

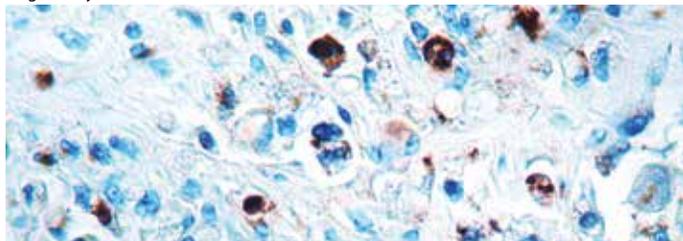
Polyclonal Rabbit Anti-Human

### Cathepsin D

F, P

Catalog No.: RP 004 Concentrated 1ml  
RP-004-05 Concentrated 0.5ml  
PDR 004 Prediluted 6ml  
PDR004-10RP Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human prostate stained with Cathepsin D antibody (RP 004).

Immunogen: Cathepsin D isolated from human liver.

Positive Control: Breast carcinoma, Prostate

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with the zymogen as well as the activated form of cathepsin D. It stains fibroblasts and macrophages strongly but stains weakly with the myoepithelial cells of breast. It stains the sweat ducts and glands in the skin, islets cells and granules of pancreatic acini.

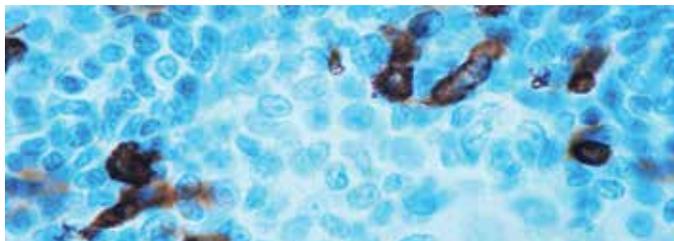
Monoclonal Mouse Anti-Human

### CD1a

F, P/H

Clone: O10  
Catalog No.: Mob 363 Concentrated 1ml  
Mob 363-05 Concentrated 0.5ml  
PDM 173 Prediluted 6ml  
PDM173-10MM Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD1a antibody (Mob 363).

Immunogen: BALB/C mice were injected with thymus cells.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane, cytoplasm

Specificity: This antibody reacts with a 49 kDa protein. At least five CD1 genes are identified (CD1a, b, c, d and e). This antibody reacts with cortical thymocytes, Langerhans cells in epidermis, dendritic cells of dermis and Langerhans cells of mucosa of tonsil. This antibody may be useful in the characterization of leukemias and lymphomas.

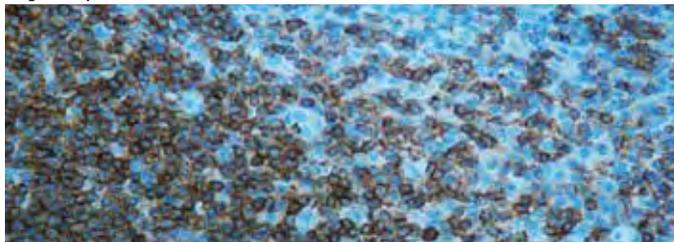
Monoclonal Mouse Anti-Human

### CD3

F, P/H

Clone: F7.2.38  
Catalog No.: Mob 422 Concentrated 1ml  
Mob 422-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD3 antibody (Mob 422).

Immunogen: Purified CD3 $\epsilon\gamma\delta$ /CD3 $\omega$

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Membrane and cytoplasmic

Specificity: CD3 is first detectable in early thymocytes and its appearance probably represents one of the earliest signs of commitment to T cell lineage. In cortical thymocytes, the antigen is predominantly present as an intracytoplasmic constituent. This antibody labels CD3 $\epsilon$  and is a useful tool for the identification of T cells and related neoplasms.

Monoclonal Rabbit Anti-Human

### CD3

F, P/H

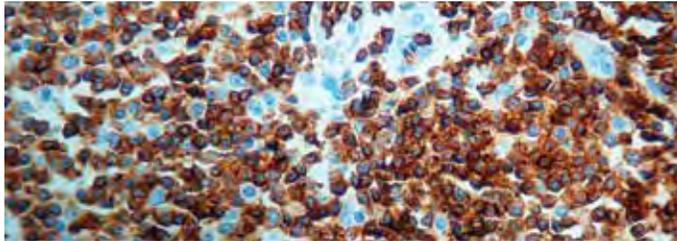
Clone: SP7

Catalog No.: RMAB 005 Concentrated 0.5ml

RMPD 005 Prediluted 6ml

RMPD005-10RM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD3 antibody (RMPD 005).

**Immunogen:** A synthetic 13-mer peptide corresponding to aa 156-168 of the  $\epsilon$  chain of human CD3 protein.

**Isotype:** IgG

**Positive Control:** Tonsil

**Cellular Localization:** Cell membrane

**Specificity:** The CD3 antigen is present on early thymocytes and mature T cells and is generally regarded as a pan-T cell marker. This antibody will help detect CD3 expression in normal and neoplastic tissues. This antibody reacts with the intracytoplasmic portion of the CD3 antigen expressed by T cells. It stains human T cells in both the cortex and medulla of the thymus and in peripheral lymphoid tissues. This antibody is suitable for staining normal and neoplastic T cells in formalin-fixed, paraffin-embedded tissues.

Monoclonal Mouse Anti-Human

### CD3, T Cell

F, P/H

Clone: PS1

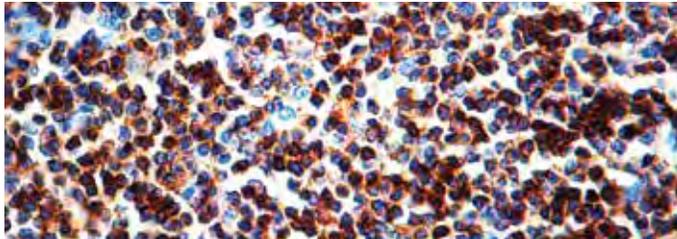
Catalog No.: Mob 112 Concentrated 1ml

Mob 112-05 Concentrated 0.5ml

PDM 126 Prediluted 6ml

PDM126-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD3 T-Cell antibody (Mob 112).

**Immunogen:**  $\epsilon$  chain of CD3.

**Isotype:** IgG2a

**Positive Control:** Tonsil

**Cellular Localization:** Cell membrane

**Specificity:** This antibody reacts specifically with the  $\epsilon$  chain of the CD3 complex. This antibody is a pan-T cell marker. On the lymphocyte surface, this antibody binds to 22/26/30 kDa molecule, which is associated with T cell antigen receptor complex. This antibody reacts with T cell chronic lymphocytic leukemias as well as with acute lymphoblastic leukemias of T cell origin.

Polyclonal Rabbit Anti-Human

### CD3, T Cell

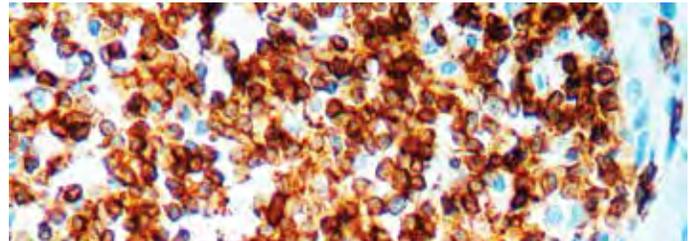
F, P/H

Catalog No.: RP 005 Concentrated 1ml

RP 005-05 Concentrated 0.5ml

PDR 002 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human pituitary stained with CD3 T-Cell antibody (PDR 002).

**Immunogen:** Synthetic human CD3 polypeptide conjugated to bovine serum albumin.

**Positive Control:** Tonsil

**Cellular Localization:** Cell membrane

**Specificity:** This antibody reacts with intracytoplasmic portion of the CD3 antigen on the T cells. It stains T cells in cortex as well as medulla of the thymus and lymphoid tissues. This antibody also labels T cell neoplasm, malignant histiocytes and Reed-Sternberg cells in Hodgkin disease.

Polyclonal Rabbit Anti-Human

### CD3 $\epsilon$ , Early T Cell Marker

F, P/H

Catalog No.: RP 116 Concentrated 1ml

RP 116-05 Concentrated 0.5ml

Regulatory Status: IVD

**Immunogen:** A synthetic 13-mer peptide corresponding to aa 156-168 of the  $\epsilon$  chain of human CD3 protein.

**Positive Control:** Tonsil

**Cellular Localization:** Cell membrane

**Specificity:** This antibody reacts with a 20 kDa protein. This antibody reacts with intracytoplasmic portion of the CD3 antigen expressed by T cells. It stains human T cells in both the cortex and medulla of the thymus and in peripheral lymphoid tissues.

Polyclonal Rabbit Anti-Human

### CD3 $\zeta$

F, P/H

Catalog No.: RP 117 Concentrated 1ml

RP 117-05 Concentrated 0.5ml

Regulatory Status: IVD

**Immunogen:** A synthetic peptide corresponding to aa 36-54 of the human CD3  $\zeta$  protein.

**Positive Control:** Tonsil

**Cellular Localization:** Cell membrane

**Specificity:** This antibody reacts with a 19 kDa protein. CD3 consists of five invariant polypeptide chains that associate to form three dimers: a heterodimer of  $\gamma$  and  $\epsilon$  chains, a heterodimer of  $\delta$  and  $\epsilon$  chains and a homodimer of two  $\zeta$  chains or a heterodimer of  $\zeta$  and  $\eta$  chains.  $\zeta$  chain consists of three consecutive copies of the same motif.

Monoclonal Mouse Anti-Human

### CD4

F, P/H

Clone: 1F6

Catalog No.: Mob 119 Concentrated 1ml

Mob 119-05 Concentrated 0.5ml

PDM 093 Prediluted 6ml

Regulatory Status: IVD

**Immunogen:** Synthetic peptide corresponding to the external domain of CD4 molecule.

**Isotype:** IgG1

**Positive Control:** Tonsil

**Cellular Localization:** Cell membrane

**Specificity:** This antibody reacts specifically with CD4 cells. CD4 is a single chain transmembrane glycoprotein with a molecular weight of 59 kDa. The CD4 antigen is found on a T cell subset (helper/inducer) and also on thymocytes and monocytes.

Monoclonal Rabbit Anti-Human

### CD5

F, P/H

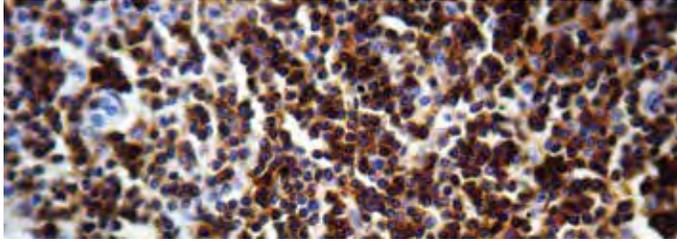
Clone: BV1

Catalog No.: RMAB 022 Concentrated 0.5ml

RMPD 022 Prediluted 6ml

RMPD022-10RM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD5 antibody (RMAB 022).

Immunogen: A synthetic cyclic peptide from the antigen C-terminus.

Isotype: IgG

Positive Control: Tonsil

Cellular Localization: Membrane

Specificity: CD5 is a glycoprotein monomer with a MW of 67 000 belonging to the scavenger receptor cysteine-rich (SRCR) family of extracellular domain-like structures, and it possesses a large cytoplasmic domain suitable for signal transduction. CD5 is a T-cell marker that also reacts with a range of neoplastic B-cells, e.g. B-cell chronic lymphocytic leukemia (B-CLL), B-cell small lymphocytic lymphoma (B-SLL), and mantle cell lymphoma. CD5 is expressed in T lymphocyte subsets and is modulated during cellular activation; however it does not react with granulocytes or monocytes.

Monoclonal Mouse Anti-Human

### CD5

F, P/H

Clone: 4C7

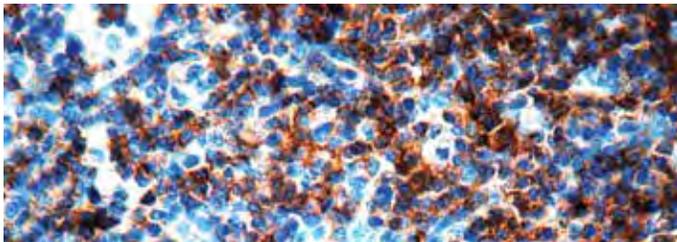
Catalog No.: Mob 138 Concentrated 1ml

Mob 138-05 Concentrated 0.5ml

PDM 095 Prediluted 6ml

PDM095-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD5 antibody (Mob 138).

Immunogen: Recombinant prokaryotic fusion protein corresponding to the external domain of the CD5 molecule.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to CD5 antigen. It stains a cell surface glycoprotein of 67 kDa present on 95% of thymocytes and 72% of peripheral blood lymphocytes. CD5 is expressed by many T cell leukemias, lymphomas and activated T cells. This antibody can be used for the detection of T cell acute lymphocytic leukemias.

Monoclonal Rabbit Anti-Human

### CD5

F, P/H

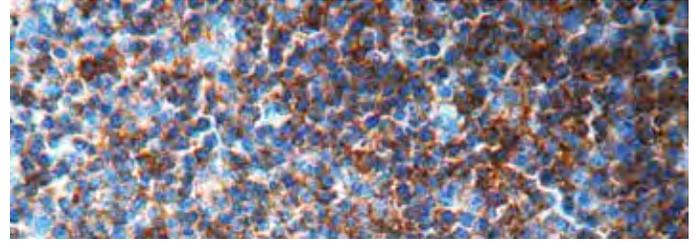
Clone: SP19

Catalog No.: RMAB 011 Concentrated 0.5ml

RMPD 011 Prediluted 6ml

RMPD011-10RM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD5 antibody (RMAB 011).

Immunogen: Synthetic peptide from the intracellular region of CD5.

Isotype: IgG

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody recognizes CD5, which is a transmembrane protein, is found on 95% of thymocytes and 72% of peripheral blood lymphocytes. In lymph nodes, the main reactivity is observed in T cell areas. CD5 is expressed by many T cell leukemia, lymphomas, and activated T cells. Occasionally, CD5 antigen is also expressed on a subset of B cells. Mantle cell lymphomas (same as diffuse centrocytic lymphomas) are CD5(+) while the follicle center cell lymphoma are CD5(-).

Monoclonal Mouse Anti-Human

### CD7

F, P/H

Clone: CBC.37

Catalog No.: Mob 419 Concentrated 1ml

Mob 419-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: CEM T-cell line (ATCC CCL-199), a T lymphoblastoid cell line, established from a patient with acute lymphoblastic leukemia.

Isotype: IgG2b

Positive Control: Tonsil

Cellular Localization: Membrane

Specificity: CD7 is a 40kDa transmembrane, single-chain glycoprotein. CD7 is expressed by majority of peripheral blood T cells, NK cells and all thymocytes. The presence or absence of CD7 is a useful marker for the classification of T- and NK-cell malignancies. The CD7 molecule is absent in a subset of human T cells under certain physiologic conditions. Thus an increase in CD7 negative T cells can be seen in some inflammatory skin disease.

Polyclonal Rabbit Anti-Human

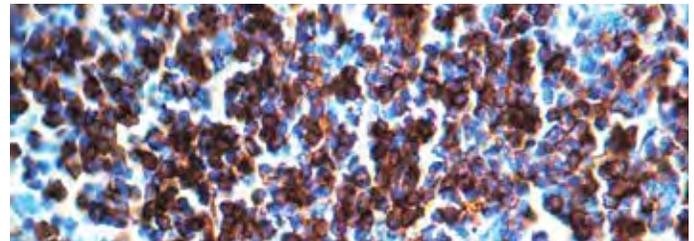
### CD8

F, P/H

Catalog No.: RP 100 Concentrated 1ml

RP 100-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD8 antibody (RP 100).

Immunogen: A synthetic peptide sequence comprising the 13 C-terminal amino acids of the cytoplasmic domain of the CD8  $\alpha$  chain.

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: The CD8 molecule is composed of two chains:  $\alpha$  and  $\beta$ . CD8 is found on a T cell subset of normal cytotoxic/suppressor cells which make up approximately 20 to 35 % of human peripheral blood lymphocytes. The CD8 antigen is also detected on natural killer cells, 80% of thymocytes, on a subpopulation of 30% of peripheral blood null cells and 15 to 30% of bone marrow cells.

Monoclonal Rabbit Anti-Human

**CD8**

F, P/H

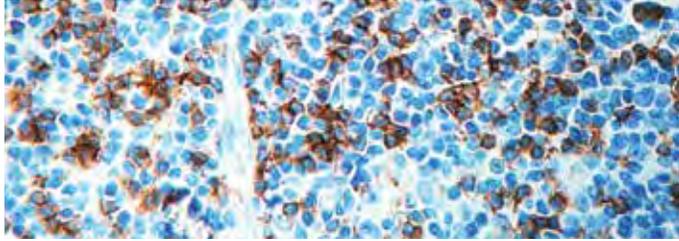
Clone: SP16

Catalog No.: RMAB 012 Concentrated 0.5ml

RMPD 012 Prediluted 6ml

RMPD012-10RM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD8 antibody (RMPD 012).

Immunogen: Synthetic peptide sequence comprising the 13 C-terminal amino acids of the cytoplasmic domain of the CD8  $\alpha$  chain.

Isotype: IgG

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody recognizes the CD8. The CD8 molecule consists of two chains,  $\alpha$  and  $\beta$ , which are expressed as a disulphide-linked  $\alpha/\beta$  heterodimer or as an  $\alpha/\alpha$  homodimer on T cell subset, thymocytes and NK cells. The majority of CD8+ T cells express CD8 as  $\alpha/\beta$  heterodimer. CD8 functions as a coreceptor in concert with TCR for binding the MHC class I/peptide complex. The HIV-2 envelope glycoprotein binds CD8  $\alpha$  chain (but not  $\beta$  chain).

Monoclonal Mouse Anti-Human

**CD8, T Cell**

F, P/H

Clone: 144B

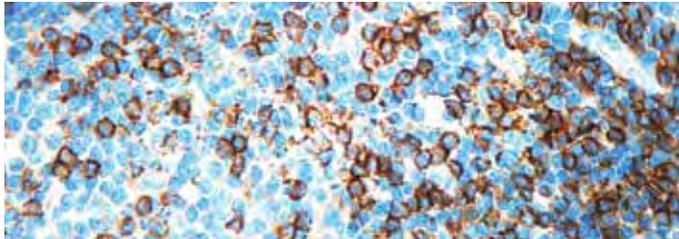
Catalog No.: Mob 117 Concentrated 1ml

Mob 117-05 Concentrated 0.5ml

PDM 094 Prediluted 6ml

PDM094-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD8 T-Cell antibody (PDM 094).

Immunogen: Synthetic peptide comprised of 13 C terminal amino acids from the cytoplasmic domain of the CD8 molecule.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts specifically with a 32 kDa protein similar to the CD8 molecule. This antibody stains cytotoxic/suppressor T cells and shows staining patterns similar to clustered CD8 monoclonal antibodies.

Monoclonal Mouse Anti-Human

**CD10/CALLA**

F, P/H

Clone: 56C6

Catalog No.: Mob 240 Concentrated 1ml

Mob 240-05 Concentrated 0.5ml

PDM 107 Prediluted 6ml

PDM107-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human renal cell carcinoma stained with CD10/CALLA (PDM 107).

Immunogen: Prokaryotic recombinant protein corresponding to the external domain of the CD10 glycoprotein.

Isotype: IgG1

Positive Control: Tonsil, Renal Cell Carcinoma

Cellular Localization: Cell membrane

Specificity: This antibody is specific to human CD10 antigen of 100 kDa, also known as common acute lymphocytic leukemia antigen (CALLA). CD10 antigen has been identified on the surface of early lymphoid progenitor cells, immature B cells within adult bone marrow and germinal center B cells within lymphoid tissue.

Monoclonal Mouse Anti-Human

**CD15/Granulocyte Associated Antigen**

F, P

Clone: MY-1

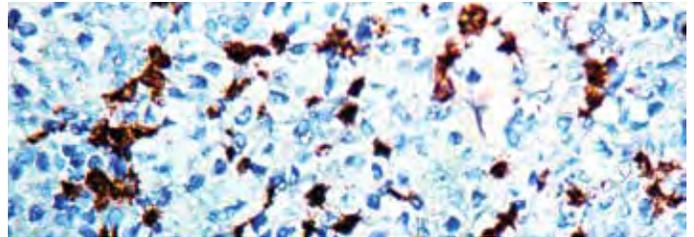
Catalog No.: Mob 024 Concentrated 1ml

Mob 024-05 Concentrated 0.5ml

PDM 098 Prediluted 6ml

PDM098-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human lymph node lymphoma stained with CD15 antibody (Mob 024).

Immunogen: Purified neutrophils from normal human peripheral blood.

Isotype: IgM, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: The specificity of this antibody is similar to antibodies Leu-M1, T $\bar{U}$  9 and VIM-D5, recognizing an epitope involving the carbohydrate sequence 3-fucosyl-N-acetyl-lactosamine. This antibody reacts with an antigen located on mature granulocytes and on Hodgkin and Reed-Sternberg cells.

Monoclonal Mouse Anti-Human

### CD15/Granulocyte Associated Antigen

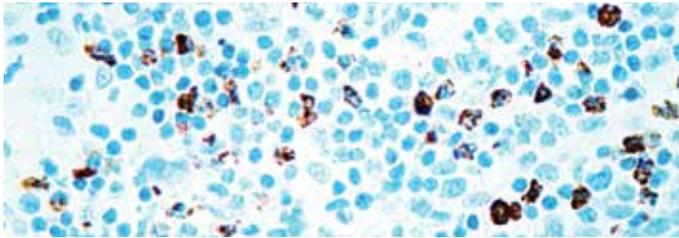
F, P/H

Clone: C3D-1

Catalog No.: Mob 147 Concentrated 1ml

Mob 147-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human lymph node lymphoma stained with CD15 antibody (Mob 147).

Immunogen: Purified neutrophils from normal human peripheral blood.

Isotype: IgM, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: The specificity of this antibody is similar to antibodies Leu-M1, TÛ 9 and VIM-D5, recognizing an epitope involving the carbohydrate sequence 3-fucosyl-N-acetyl-lactosamine. This antibody reacts with an antigen located on mature granulocytes and on Hodgkin and Reed-Sternberg cells.

Monoclonal Mouse Anti-Human

### CD15/Granulocyte Associated Antigen

F, P/H

Clone: MMA; same as LeuM1

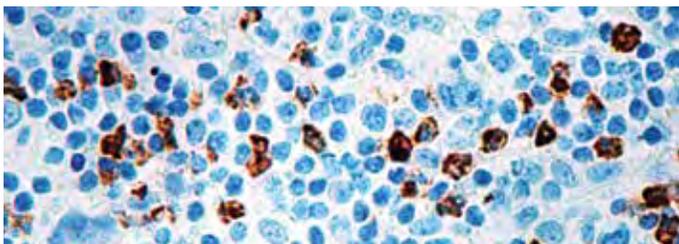
Catalog No.: Mob 365 Concentrated 1ml

Mob 365-05 Concentrated 0.5ml

PDM 127 Prediluted 6ml

PDM127-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD15 antibody (Mob 365).

Immunogen: BALB/C mice were injected with U937 histiocytic cell line.

Isotype: IgM, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a 220 kDa protein. CD15 plays a role in mediating phagocytosis, bactericidal activity and chemotaxis. It is present on >95% of granulocytes including neutrophils and eosinophils and to a lesser degree on monocytes. CD15 is also expressed in Reed-Sternberg cells and some epithelial cells. CD15 is very useful in the identification of Hodgkin disease.

Polyclonal Rabbit Anti-Human

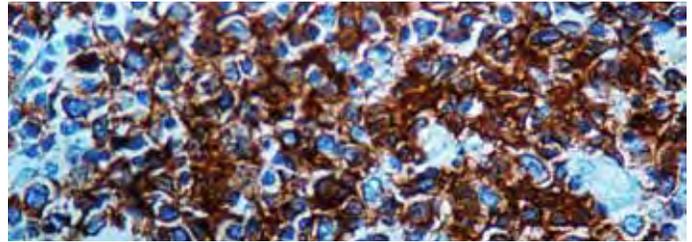
### CD20

F, P

Catalog No.: RP 041 Concentrated 1ml

RP 041-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD20 antibody (RP 041).

Immunogen: Synthetic peptide derived from C-terminus of human CD20 protein.

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a 33 kDa protein located on most human B lymphocytes. It stains B lymphocytes in the germinal centers and mantle zones of tonsil. This antibody can be used for the typing of malignant lymphomas and other lymphoproliferative disorders.

Monoclonal Rabbit Anti-Human

### CD20

F, P

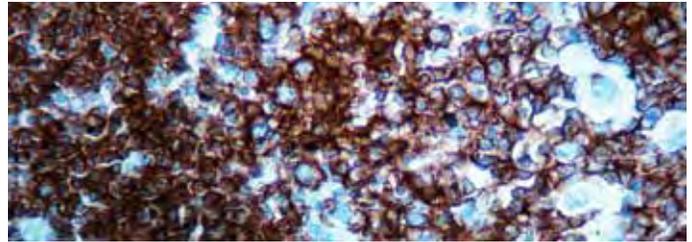
Clone: BV11

Catalog No.: RMAB 032 Concentrated 0.5ml

RMPD 032 Concentrated 6 ml

RMPD032-10RM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD20 antibody (RMPD 032).

Immunogen: A synthetic peptide from the C-terminus of human CD 20 protein.

Isotype: IgG

Positive Control: Tonsil

Cellular Localization: Cytoplasmic and membrane

Specificity: This antibody reacts with CD20, which is a 33kDa leukocyte surface antigen consisting of four transmembrane regions and cytoplasmic N- and C-termini. CD20 is expressed primarily on B cells but has also been detected on both normal and neoplastic T cells. Activation of CD20 significantly increases DNA synthesis and is thought to involve basic helix-loop-helix leucine zipper transcription factors.



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Monoclonal Mouse Anti-Human

**CD20, B Cell**

F, P

Clone: L26

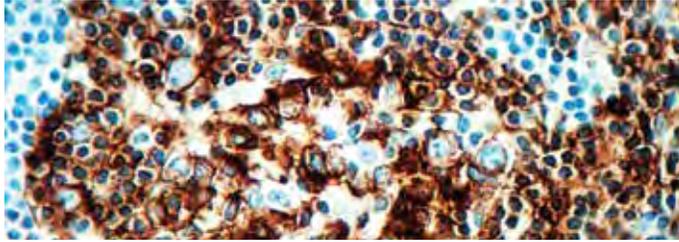
Catalog No.: Mob 004 Concentrated 1ml

Mob 004-05 Concentrated 0.5ml

PDM 004 Prediluted 6ml

PDM004-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD20, B cell antibody (Mob 004).

Immunogen: BALB/C mice were injected with human tonsil B cells.

Isotype: IgG2a, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane and cytoplasm

Specificity: This antibody is specific to a 33 kDa polypeptide present on the majority of B cells in peripheral blood and lymphoid tissue. No reactivity with other hematopoietic cells has been observed.

Monoclonal Mouse Anti-Human

**CD21, B Cell**

F, P

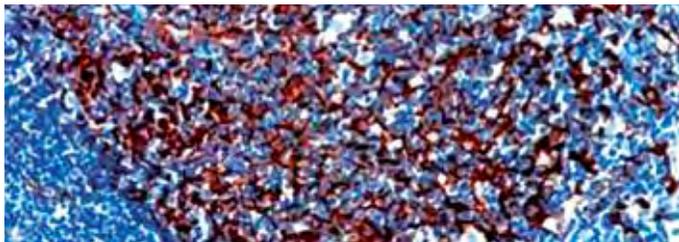
Clone: 1F8

Catalog No.: Mob 028 Concentrated 1ml

Mob 028-05 Concentrated 0.5ml

PDM 122 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD21 antibody (Mob 028).

Immunogen: Purified receptor for the C3d fragment of the third complement component CR2, from human tonsil.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with CD21 antigen of MW 145 kDa, present on the surface of mature B cells. The antigen is present at high density on follicular dendritic cells. CD21 is involved in transmitting growth-promoting signals to the interior of the B cell.

Monoclonal Mouse Anti-Human

**CD23**

F, P/H

Clone: 1B12

Catalog No.: Mob 294 Concentrated 1ml

Mob 294-05 Concentrated 0.5ml

PDM 143 Prediluted 6ml

PDM143-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD23 antibody (Mob 294).

Immunogen: Prokaryotic recombinant fusion protein corresponding to the external domain of the CD23 molecule.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to a membrane glycoprotein of 45 kDa, designated as CD23. CD23 is found on a subpopulation of peripheral blood cells, B lymphocytes and on EBV transformed B lymphoblastoid cell lines. Expression of CD23 has been detected in neoplastic cells from cases of B cell chronic lymphocytic leukemias.

Polyclonal Rabbit Anti-Human

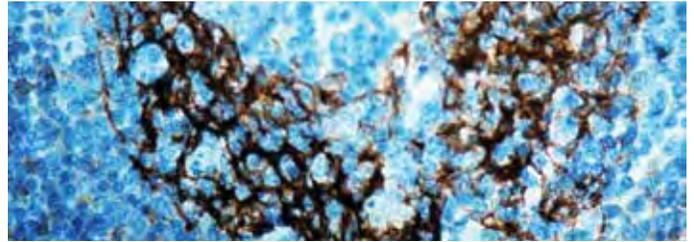
**CD23**

F, P/H

Catalog No.: RP 119 Concentrated 1ml

RP 119-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD23 antibody (RP 119).

Immunogen: Recombinant protein encoding human CD23 40-248 aa.

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a 45 kDa protein. CD23 is present on a subpopulation of freshly isolated peripheral blood and tonsil B cells and strongly expressed on EBV-transformed B lymphoblasts. The CD23 molecule is identical to the low affinity IgE receptor found on B cells. Expression of CD23 has been detected in neoplastic cells from cases of B cell chronic lymphocytic leukemia.



**Did you know?**

Here is an interesting tidbit about the dandelion. The individual seedlings that float on the wind like miniature parachutes resemble the shape of an antibody—the center of the DBS logo. ■

Monoclonal Rabbit Anti-Human

### CD23

F, P/H

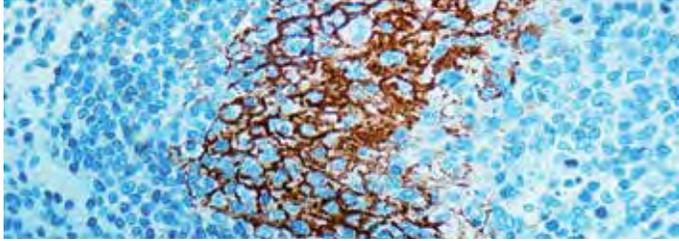
Clone: SP23

Catalog No.: RMAB 013 Concentrated 0.5ml

RMPD 013 Prediluted 6ml

RMPD013-10RM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD23 antibody (RMAB 013).

Immunogen: Recombinant protein encoding human CD23 48-248 aa.

Isotype: IgG

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody recognizes CD23. CD23 is a 45kDa glycoprotein, which is present on a subpopulation of freshly isolated peripheral blood and tonsil B cells and strongly expressed on EBV-transformed B lymphoblasts. The CD23 molecule is identical to the low affinity IgE receptor found on B cells. Expression of CD23 has been detected in neoplastic cells from cases of B cell chronic lymphocytic leukemia and some cases of centroblastic/centrocytic lymphoma.

Monoclonal Mouse Anti-Human

### CD23, B Cell

F, P/H

Clone: MHM6

Catalog No.: Mob 152 Concentrated 1ml

Mob 152-05 Concentrated 0.5ml

PDM 105 Prediluted 6ml

Regulatory Status: IVD

Immunogen: EBV-transformed B lymphoblastoid cells.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a glycoprotein of MW 45 kDa, present on the surface of peripheral blood and tonsil B cells. It stains the mantle zone lymphocytes and a fraction of dendritic reticulum cells. This antibody stains B cells in chronic lymphocytic leukemia.

Monoclonal Mouse Anti-Human

### CD25/IL-2R $\alpha$

F, P/H

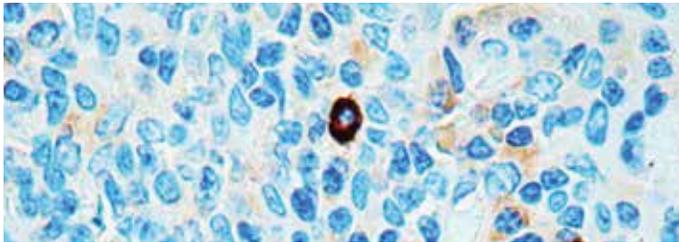
Clone: IL2R.1

Catalog No.: Mob 254 Concentrated 1ml

Mob 254-05 Concentrated 0.5ml

PDM 144 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD25 antibody (Mob 254).

Immunogen: BALB/C mice were injected with recombinant human interleukin-2 receptor.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to a 55 kDa protein known as interleukin 2-receptor  $\alpha$  (IL-2R  $\alpha$ ). IL-2R  $\alpha$  is over expressed on the surface of activated T cells, HTLV-1 or HTLV-2 positive T cell lines and moderately expressed on activated B cells, NK-cells and macrophages.

Monoclonal Mouse Anti-Human

### CD30/Ki-1 Antigen

F, P/H

Clone: Ber-H2

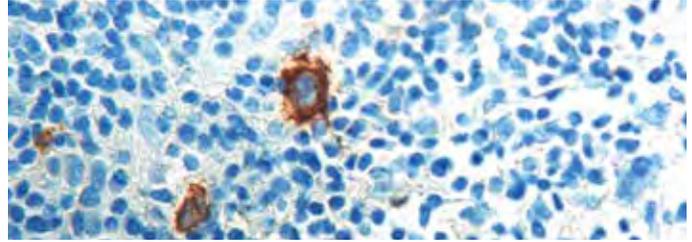
Catalog No.: Mob 032 Concentrated 1ml

Mob 032-05 Concentrated 0.5ml

PDM 018 Prediluted 6ml

PDM018-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD30 antibody (Mob 032).

Immunogen: BALB/C mice were immunized with L428 cell line.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a 105 kDa glycoprotein expressed by Hodgkin and Reed-Sternberg cells and by tumor cells of a majority of large cell lymphomas. In normal lymphoid tissues, it reacts with a small population of large cells present around B cell follicles and sometimes at the rim of germinal centers.

Monoclonal Mouse Anti-Human

### CD31, Endothelial Cell

F, P/H

Clone: JC/70A

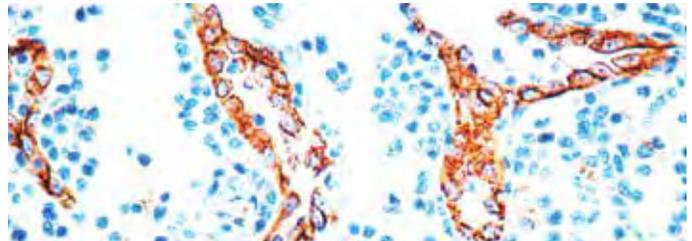
Catalog No.: Mob 034 Concentrated 1ml

Mob 034-05 Concentrated 0.5ml

PDM 020 Prediluted 6ml

PDM020-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD31 antibody (Mob 034).

Immunogen: BALB/C mice were immunized with membrane preparation of a spleen from a patient with hairy cell leukemia.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a 100 kDa glycoprotein expressed by endothelial cells and 130 kDa glycoprotein present in platelets. It stains endothelial cells in normal as well as malignant tissues.

Monoclonal Mouse Anti-Human

### CD34, Endothelial Cell

F, P

Clone: QBEND/10

Catalog No.: Mob 098 Concentrated 1ml

Mob 098-05 Concentrated 0.5ml

PDM 050 Prediluted 6ml

PDM050-10MM Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human kidney angiosarcoma stained with CD34 antibody (Mob 098).

Immunogen: Endothelial cells (HUVE).

Isotype: IgG1, kappa

Positive Control: Tonsil, Kidney

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a glycoprotein of MW 110 kDa, present on the surface of hematopoietic cells i.e. myeloid and lymphoid progenitors. It stains the vascular endothelial cells.

Monoclonal Mouse Anti-Human

### CD35/CR1, Follicular Dendritic Cell Marker

F, P/H

Clone: E11

Catalog No.: Mob 255 Concentrated 1ml

Mob 255-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with intact human monocytes.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to a 210-220 kDa protein, which is identified as the complement receptor 1 (CR1/CD35). This antibody recognizes a site in CR1 that is distal from the C3b-binding site, so that it is unable to block CR1 activity. This antibody does not cross-react with CR2.

Monoclonal Mouse Anti-Human

### CD35, Dendritic Reticulum Cell

F, P/E

Clone: Ber-MAC-DRC

Catalog No.: Mob 155 Concentrated 1ml

Mob 155-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Suspended human tonsillar cells.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to 220 kDa receptor for the C3b fragment of the third component of human complement. This antibody shows a strong staining of follicular dendritic cells.

Monoclonal Mouse Anti-Human

### CD38, Plasma Cell

F

Clone: AT13/5

Catalog No.: Mob 297 Concentrated 1ml

Mob 297-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were immunized with NAMALWA cell line.

Isotype: IgG1, kappa.

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a 45 kDa type II integral membrane glycoprotein. CD38 is expressed on B cell, thymocytes, granulocytes, T cells and activated T cells. This antibody reacts with 40-80% of peripheral blood lymphocytes, monocytes and granulocytes.

Monoclonal Mouse Anti-Human

### CD43, T Cell

F, P

Clone: DF-T1

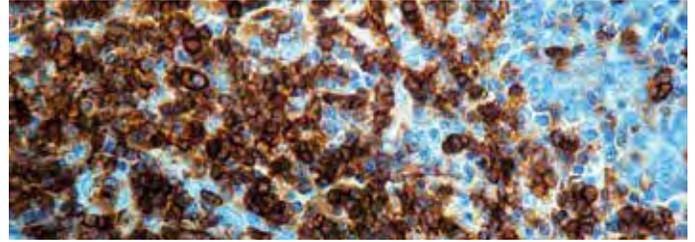
Catalog No.: Mob 039 Concentrated 1ml

Mob 039-05 Concentrated 0.5ml

PDM 060 Prediluted 6ml

PDM060-10MM Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD43 T-cell antibody (Mob 039).

Immunogen: BALB/C mice were immunized with myeloblast cell line KG1.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with an antigen expressed by normal and neoplastic T cells and myeloid lineage cells. It strongly stains T cells in the interfollicular areas of normal lymphoid tissues.

Monoclonal Mouse Anti-Human

### CD44/HCAM

F, P/H

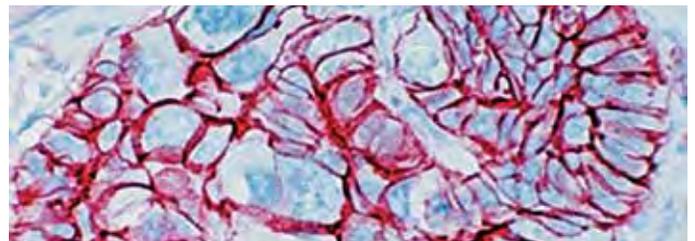
Clone: 156-3C11

Catalog No.: Mob 256 Concentrated 1ml

Mob 256-05 Concentrated 0.5ml

PDM 172 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD44, HCAM antibody (Mob 256).

Immunogen: BALB/C mice were injected with stimulated human leukocytes.

Isotype: IgG2a

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to a cell surface glycoprotein of 80-95 kDa, known as CD44. CD44 is expressed on the surface of lymphocytes, monocytes and granulocytes. This antibody reacts with red cells pretreated with 2-aminoethyl isothiuronium bromide (AET).

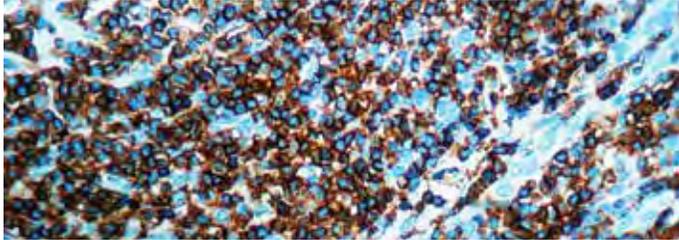
Monoclonal Mouse Anti-Human

### CD45/Leukocyte Common Antigen (LCA) F, P

Clone: PD7/26 + 2B11

Catalog No.: Mob 040 Concentrated 1ml  
Mob 040-05 Concentrated 0.5ml  
PDM 009 Prediluted 6ml  
PDM009-10MM Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD45,LCA antibody (PDM 009).

Immunogen: BALB/C mice were immunized with human peripheral blood lymphocytes to raise clone PD7/26 and with isolated neoplastic cells from T cell lymphoma to raise clone 2B11.

Isotype: Both clones, IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: The human leukocyte common antigen is a family of five or more high molecular weight glycoproteins of MW 180, 190, 205 and 220 kDa, present on the surface of the majority of human leukocytes. This antibody labels lymphoid cells. It labels neoplastic B and T cells in non-Hodgkin lymphoma and in leukemias of B and T cell types.

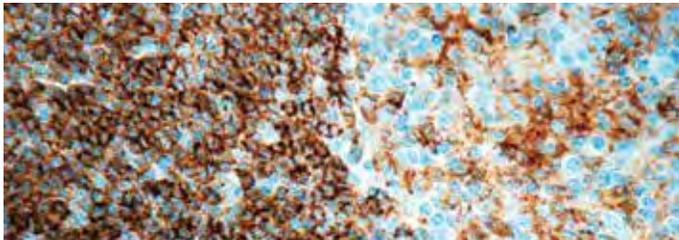
Monoclonal Mouse Anti-Human

### CD45RA, B Cell F, P

Clone: 4KB5

Catalog No.: Mob 041 Concentrated 1ml  
Mob 041-05 Concentrated 0.5ml  
PDM 061 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD45RA B-Cell antibody (Mob 041).

Immunogen: BALB/C mice were immunized with hairy cell leukemia cells.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with most of the B cells in tissue sections and in peripheral blood as well as a small population of T cells and monocytes. Clone 4KB5 appears similar to two other anti-CD45RA antibodies.

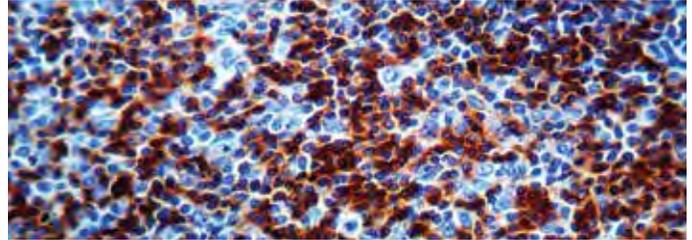
Monoclonal Mouse Anti-Human

### CD45RO, T Cell F, P

Clone: UCHL1

Catalog No.: Mob 043 Concentrated 1ml  
Mob 043-05 Concentrated 0.5ml  
PDM 015 Prediluted 6ml  
PDM015-10MM Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD45RO, T Cell antibody (PDM 015).

Immunogen: BALB/C mice were immunized with IL-2 dependent T cell line, CA1.

Isotype: IgG2a, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a 180 kDa glycoprotein of the CD45 family, found on most thymocytes and activated T cells but only on a portion of the resting T cells. It reacts with most thymocytes, a subpopulation of resting cells within both the CD4 and CD8 subsets and mature activated T cells.

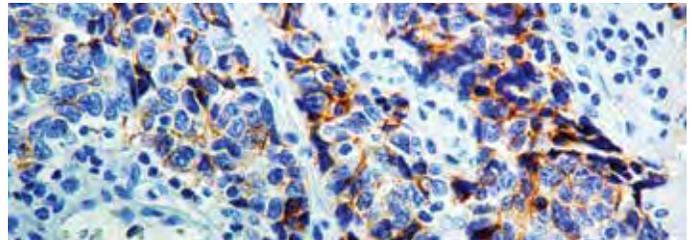
Monoclonal Mouse Anti-Human

### CD56/Neural Cell Adhesion Molecule-1 (NCAM-1) F, P/H

Clone: 123C3.D5

Catalog No.: Mob 261 Concentrated 1ml  
Mob 261-05 Concentrated 0.5ml  
PDM 110 Prediluted 6ml  
PDM110-10MM Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human lung small cell carcinoma stained with CD56/NCAM-1 antibody (Mob 261).

Immunogen: BALB/C mice were injected with membrane preparation of a small cell lung carcinoma.

Isotype: IgG1, kappa

Positive Control: Neuroblastoma

Cellular Localization: Cell membrane

Specificity: This antibody is specific to two proteins of 185 kDa and 145 kDa, identified as two isoforms of neural cell adhesion molecules (NCAM/CD56). NCAM is expressed on most neuroectodermal derived cell lines, tissues and neoplasms such as retinoblastoma, medulloblastoma, astrocytoma and neuroblastoma.

Monoclonal Mouse Anti-Human

**CD57**

F, P

Clone: NK-1

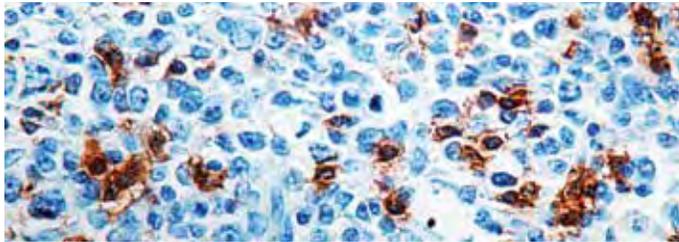
Catalog No.: Mob 163 Concentrated 1ml

Mob 163-05 Concentrated 0.5ml

PDM 130 Prediluted 6ml

PDM130-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD57 antibody (Mob 163).

Immunogen: Human peripheral blood mononuclear cells.

Isotype: IgM

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to a 110kDa human CD57 myeloid associated glycoprotein. It stains mononuclear cells with natural killer activity, neuroendocrine cells and their tumors.

Monoclonal Mouse Anti-Human

**CD61/Platelet Glycoprotein IIIa**

F, P/E

Clone: Y2/51

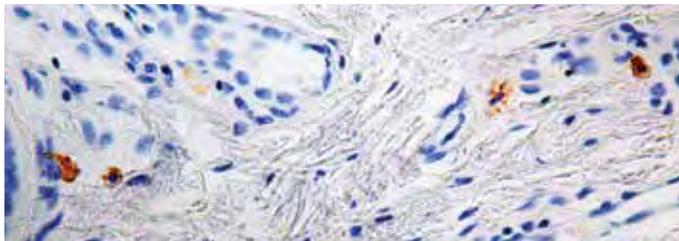
Catalog No.: Mob 164 Concentrated 1ml

Mob 164-05 Concentrated 0.5ml

PDM 064 Prediluted 6ml

PDM064-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD61 antibody (Mob 164).

Immunogen: BALB/C mice were immunized with PHA-stimulated human mononuclear cells.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody recognizes a glycoprotein of 110 kDa molecular weight present on human platelets and also reacts with megakaryocytes and megakaryoblasts. The antigen is also present on endothelium and osteoclasts. The glycoprotein IIIa molecule produced by endothelium cells is identical in sequence to platelet glycoprotein IIIa.

Monoclonal Mouse Anti-Human

**CD62E/E-Selectin**

F

Clone: 1.2B6

Catalog No.: Mob 165 Concentrated 1ml

Mob 165-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with TNF-activated human umbilical vein endothelial cells.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to E-selectin in human and pigs. E-selectin is a single-chain glycoprotein of 110 kDa and is expressed by activated endothelial cells. E-selectin functions as an adhesion molecule for leukocytes in inflammation.

Monoclonal Mouse Anti-Human

**CD63**

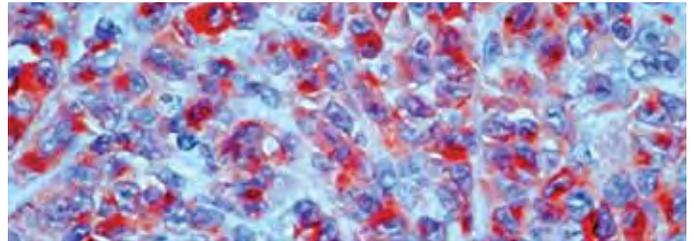
F, P/H

Clone: NKI/C3 (same as MX-49.129.5)

Catalog No.: Mob 301 Concentrated 1ml

Mob 301-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human melanoma stained with CD63 antibody (Mob 301).

Immunogen: Smooth plasma membrane fraction of MeWo cells.

Isotype: IgG1, kappa

Positive Control: Melanoma

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 53 kDa protein, expressed on activated platelets. CD63 is a lysosomal membrane glycoprotein that is translocated to plasma membrane after platelet activation. It is also expressed on granulocytes, B cells and T cells.

Monoclonal Mouse Anti-Human

**CD68, Macrophage**

F, P/H

Clone: KP1

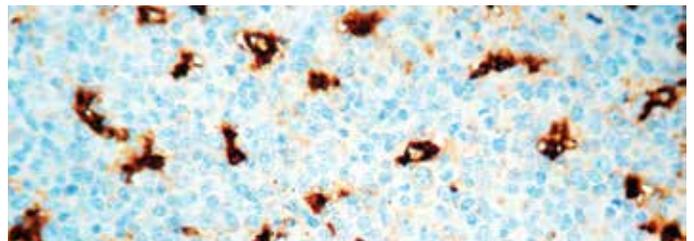
Catalog No.: Mob 167 Concentrated 1ml

Mob 167-05 Concentrated 0.5ml

PDM 066 Prediluted 6ml

PDM066-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD68 Macrophage (PDM 066).

Immunogen: Subcellular fraction of human alveolar macrophages.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to macrophages in a wide variety of human tissues. It reacts with myeloid precursors and peripheral blood granulocytes. It also stains a cell population known as plasmacytoid T cells.

Monoclonal Mouse Anti-Human

### CD68, Macrophage

F, P/H/E

Clone: PG-M1

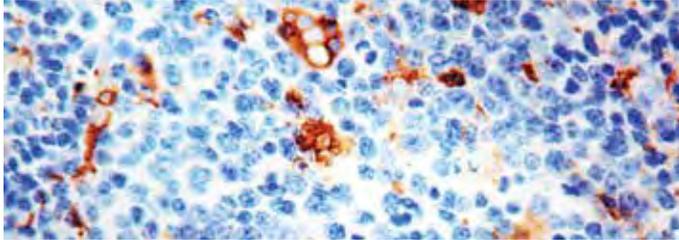
Catalog No.: Mob 094 Concentrated 1ml

Mob 094-05 Concentrated 0.5ml

PDM 065 Prediluted 6ml

PDM065-10MM Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD68 antibody (Mob 094).

Immunogen: BALB/C mice were immunized with Gaucher's cells.

Isotype: IgG3, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a glycoprotein of 110 kDa, expressed as intracytoplasmic molecule. It stains macrophages in a wide variety of tissues. Myeloid precursor cells and peripheral granulocytes are negative. The PG-M1 differs from EMB11 (CD68) because of its non-reactivity with granulocytes and their precursor cells.

Monoclonal Mouse Anti-Human

### CD74, Lymphoid Marker

F, P/H

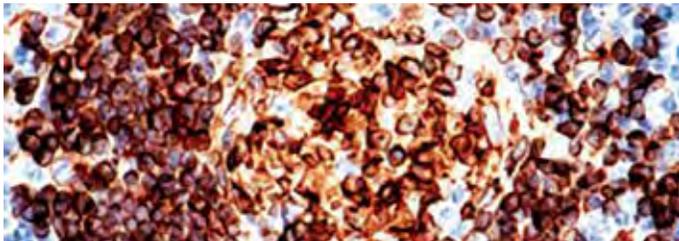
Clone: LN2

Catalog No.: Mob 168 Concentrated 1ml

Mob 168-05 Concentrated 0.5ml

PDM 033 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD74 antibody (Mob 168).

Immunogen: SU-DHL-4 lymphoma cells.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to CD74. This antibody can be used for the identification of B cell lymphomas and leukemias. It also stains activated neoplastic cells in T cell lymphomas and Sternberg-Reed cells.

Monoclonal Rabbit Anti-Human

### CD79a

F, P/H

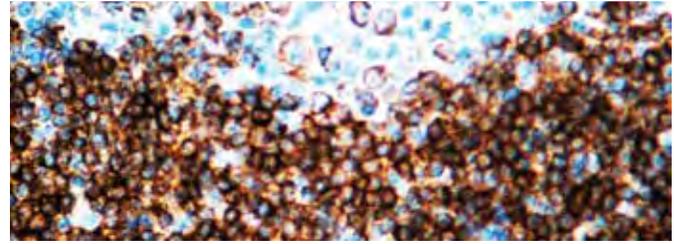
Clone: SP18

Catalog No.: RMAB 014 Concentrated 0.5ml

RMPD 014 Prediluted 6ml

RMPD014-10RM Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD79a antibody (RMAB 014).

Immunogen: Synthetic peptide derived from N-terminal region of human CD79a protein.

Isotype: IgG

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody recognizes CD79a. CD79a is a disulphide-linked heterodimer, consisting of CD79a / mb-1 and CD79b / B29 polypeptides. It is non-covalently associated with membrane-bound immunoglobulins on B cells to constitute the B cell Ag receptor. CD79a first appears at pre B cell stage and persists until the plasma cell stage where it is found as an intracellular component. CD79a is found in the majority of acute leukemias of precursor B cell type, in B cell lines, B cell lymphomas, and in some myelomas.

Monoclonal Mouse Anti-Human

### CD79a Antigen

F, P/H

Clone: HM47/A9

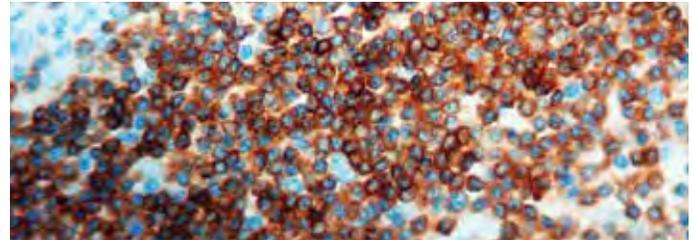
Catalog No.: Mob 242 Concentrated 1ml

Mob 242-05 Concentrated 0.5ml

PDM 125 Prediluted 6ml

PDM125-10MM Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD79a Antigen (PDM 125).

Immunogen: Synthetic polypeptide consisting of the amino acid sequence GTYQDVGSLNIADVQ.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to human CD79a antigen complex, consisting of two polypeptides non-covalently associated with membrane-bound immunoglobulins on B cells. This complex of polypeptide and immunoglobulins constitute the B cell antigen receptor. The two components of this complex are designated CD79a and CD79b. The CD79a antigen appears at the pre-B cell stage, early in maturation and persists until the plasma cell stage. The CD79a antigen is found in majority of acute leukemias of precursor B cell type, in B cell lines and B cell lymphomas.

Monoclonal Mouse Anti-Human

**CD79a, B Cell**

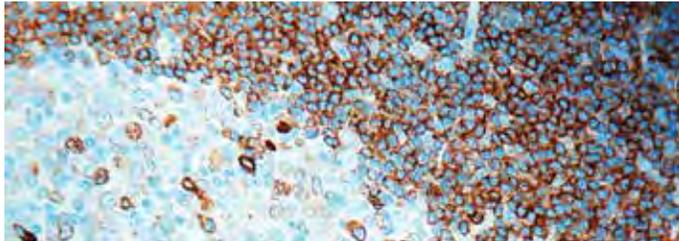
F, P/H

Clone: HM57

Catalog No.: Mob 118 Concentrated 1ml

Mob 118-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD79a antibody (Mob 118).

**Immunogen:** Synthetic peptide comprising of 202-216 C terminal amino acids part of mb-1 protein.

**Isotype:** IgG1, kappa

**Positive Control:** Tonsil

**Cellular Localization:** Cell membrane

**Specificity:** This antibody reacts specifically with B cells at the pre B cell stage. It stains a majority of acute leukemias of precursor B cell type, B cell lymphomas and some myelomas. The mb-1 polypeptide along with B29 polypeptide forms an antigen receptor complex on the B cell, performing signal transduction and phosphorylation functions.

Polyclonal Rabbit Anti-Human

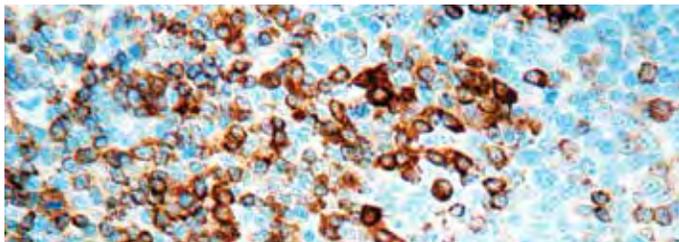
**CD79a/mb-1, B Cell Marker**

F, P/H

Catalog No.: RP 101 Concentrated 1ml

RP 101-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD79a antibody (RP 101).

**Immunogen:** A synthetic peptide derived from the N-terminal region of human CD79a protein.

**Positive Control:** Tonsil

**Cellular Localization:** Cell membrane

**Specificity:** CD79a is a disulfide-linked heterodimer, consisting of CD79a/mb-1 and CD79b/B29 and is non-covalently associated with membrane-bound immunoglobulins on B cells to constitute the B cell antigen receptor. CD79a first appears at pre B cell stage where it is found as an intracellular component. CD79a is found in the majority of acute leukemias of precursor B cell type, in B cell lines, B cell lymphomas and in some myelomas.

Polyclonal Rabbit Anti-Human

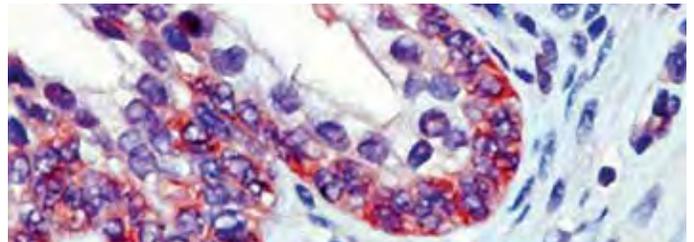
**CD95/Fas**

F, P/H

Catalog No.: RP 065 Concentrated 1ml

RP 065-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human small intestine stained with CD95/Fas antibody (RP 065).

**Immunogen:** A synthetic peptide from the C-terminus of human Fas protein.

**Positive Control:** Small intestine

**Cellular Localization:** Cell membrane

**Specificity:** This antibody reacts with a 48 kDa transmembrane glycoprotein, known as CD95 (Fas). The Fas antigen is expressed on the surface of various cell types, including activated T and B lymphocytes and T lymphoblastoid cell lines. CD95 mediates receptor-triggered apoptosis.

Monoclonal Mouse Anti-Human

**CD99/MIC2, Ewing's Sarcoma Marker**

F, P/H

Clone: HO36-1.1

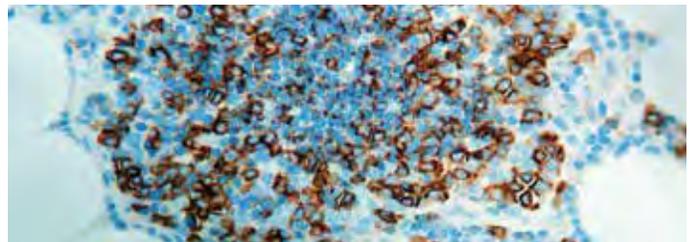
Catalog No.: Mob 262 Concentrated 1ml

Mob 262-05 Concentrated 0.5ml

PDM 106 Prediluted 6ml

PDM106-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human thymoma stained with CD99/MIC2 antibody (PDM 106).

**Immunogen:** BALB/C mice were injected with purified E-rosette forming cells from human peripheral blood lymphocytes.

**Isotype:** IgM

**Positive Control:** Tonsil, Thyoma

**Cellular Localization:** Cell membrane

**Specificity:** This antibody is specific to a sialoglycoprotein of 27-32 kDa known as CD99 or MIC2 gene product. CD99 is expressed on the cell membrane of some lymphocytes, cortical thymocytes and granulosa cells of the ovary, sertoli cells of testis, pancreatic islet cells and some endothelial cells. Mature granulocytes express very little or no CD99.



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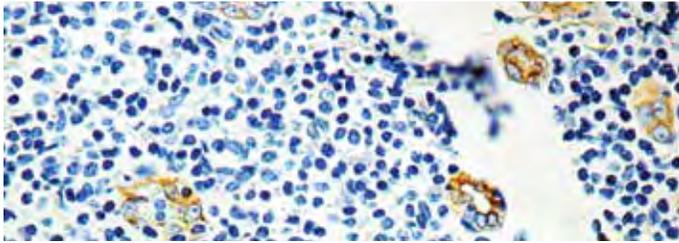
Monoclonal Mouse Anti-Human  
**CD105/Endoglin/TGF-β1/3 Receptor**

Clone: SN6h

Catalog No.: Mob 364 Concentrated 1ml  
Mob 364-05 Concentrated 0.5ml

F, P/E

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD105 antibody (Mob 364).

Immunogen: BALB/C mice were injected with purified GP160 from cell membrane glycoproteins of fresh non-T/non-B acute lymphoblastic leukemia cells.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with 95 kDa (monomer) and 190 kDa (dimer) proteins. CD105 or endoglin is a Type I transmembrane protein, which is highly expressed on human vascular endothelial cells. It exists on an O- and N-glycosylated homodimer. Up regulation of endoglin expression has been demonstrated in tumor vasculature and proliferating cells, suggesting that it is a proliferation associated endothelial marker. CD105 binds to TGF-β1 and β3 with high affinity but not to TGF-β2.

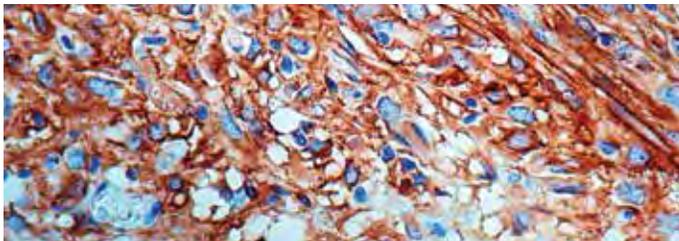
Polyclonal Rabbit Anti-Human

**CD117/c-kit**

F, P/H

Catalog No.: RP 063 Concentrated 1ml  
RP 063-05 Concentrated 0.5ml  
PDR 045 Prediluted 6ml  
PDR045-10RP Prediluted 10ml **3 6 0**

Regulatory Status: ASR



Formalin fixed paraffin embedded human gastrointestinal stromal tumor stained with CD117/c-kit antibody (RP 063).

Immunogen: A synthetic peptide from C-terminus of human CD117/c-kit protein.

Positive Control: Tonsil

Cellular Localization: Cell membrane, cytoplasm

Specificity: This antibody reacts with a 145 kDa protein. CD117/c-kit is a transmembrane receptor tyrosine kinase and is expressed in many tissues and cells. CD117/c-kit is involved in the development of several lineages of stem cells, such as germ cells, neural crest derived melanocytes and hematopoietic precursor cells. This antibody can be used in the identification of gastrointestinal stromal tumors.

Monoclonal Mouse Anti-Human

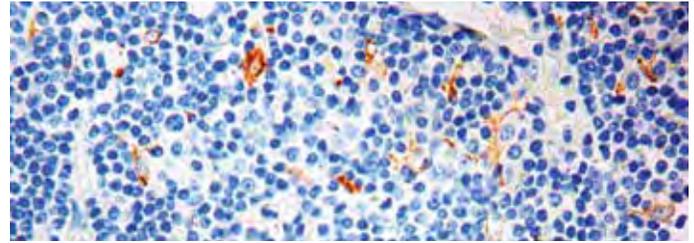
**CD163**

Clone: 10D6

Catalog No.: Mob 460 Concentrated 1ml  
Mob 460-05 Concentrated 0.5ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with CD163 antibody (Mob 460).

Immunogen: Human CD163 antigen.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Membrane

Specificity: The CD163 molecule is a type I membrane protein also known as M130 antigen, Ber-Mac3, Ki-M8 or SM4. CD163 protein is restricted in its expression to the monocytic/macrophage lineage. It is reported to be present on all circulating monocytes and most tissue macrophages except those found in the mantle zone and germinal centers of lymphoid follicles, interdigitating reticulum cells and Langerhans cells. In addition, multinucleated cells within inflammatory lesions are reported not to express CD163 protein. The protein is upregulated by glucocorticoids and downregulated by the immunosuppressant cyclosporin A and by phorbol esters.

Monoclonal Mouse Anti-Human

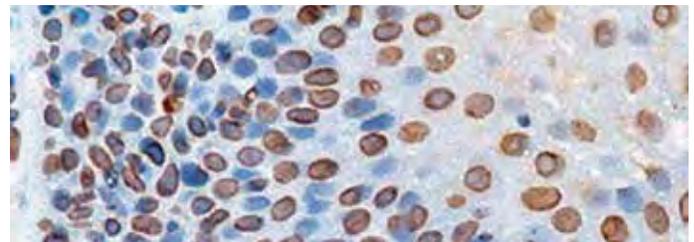
**Cdc25A**

F, P/H

Clone: DCS-120

Catalog No.: Mob 337 Concentrated 1ml  
Mob 337-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cdc25A antibody (Mob 337).

Immunogen: BALB/C mice were injected with purified recombinant Cdc25A.

Isotype: IgG2a

Positive Control: Tonsil

Cellular Localization: Nuclear membrane

Specificity: This antibody reacts with a 65 kDa protein known as Cdc25A. The activity of cyclin-dependent kinases in cell cycle is regulated by the phosphorylation status, which is controlled by the antagonistic action of wee 1 kinase and Cdc25 phosphatases. Three CDC25 genes are present in human cells: CDC25A, CDC25B and CDC25C. Cdc25A and Cdc25B are expressed throughout the cell cycle, with peak expression in G1 for Cdc25A and in both G1-S phase and G2 for Cdc25B. Cdc25C is mainly expressed in G2 phase.

Monoclonal Mouse Anti-Human

### Cdc25B

F, P/H

Clone: DCS-162

Catalog No.: Mob 338 Concentrated 1ml

Mob 338-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with purified recombinant Cdc25B.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: This antibody reacts with a 63 kDa protein known as Cdc25B. The activity of cyclin-dependent kinases in cell cycle is regulated by the phosphorylation status, which is controlled by the antagonistic action of wee 1 kinase and Cdc25 phosphatases. Three CDC25 genes are present in human cells: CDC25A, CDC25B and CDC25C. Cdc25A and Cdc25B are expressed throughout the cell cycle, with peak expression in G1 for Cdc25A and in both G1-S phase and G2 for Cdc25B. Cdc25C is mainly expressed in G2 phase.

Monoclonal Mouse Anti-Human

### Cdc25C

F, P/H

Clone: TC-113

Catalog No.: Mob 339 Concentrated 1ml

Mob 339-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with purified recombinant Cdc25C.

Isotype: IgG1, kappa

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 53-56 kDa protein known as Cdc25C. The activity of cyclin-dependent kinases in cell cycle is regulated by the phosphorylation status, which is controlled by the antagonistic action of wee 1 kinase and Cdc25 phosphatases. Three CDC25 genes are present in human cells: CDC25A, CDC25B and CDC25C. Cdc25A and Cdc25B are expressed throughout the cell cycle, with peak expression in G1 for Cdc25A and in both G1-S phase and G2 for Cdc25B. Cdc25C is mainly expressed in G2 phase.

Monoclonal Mouse Anti-Human

### Cdc47/MCM7

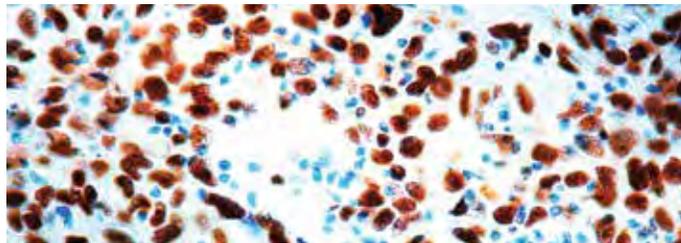
F, P/H

Clone: 47DC141

Catalog No.: Mob 340 Concentrated 1ml

Mob 340-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast carcinoma stained with Cdc47/MCM7 antibody (Mob 340).

Immunogen: BALB/C mice were injected with recombinant human cdc47 protein.

Isotype: IgG1

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: This antibody reacts with an 80 kDa protein known as hCdc47. hCdc47 is a member of the MCM family, which allows DNA to replicate once per cell cycle. Expression of Cdc47 protein has been found in the nuclei of proliferative components of normal lymph nodes, bone marrow, epidermis and mucosa. Malignant tumors from several organs contain more nuclear hCdc47-positive cells than their normal counterparts.

Monoclonal Mouse Anti-Human

### Cdk2

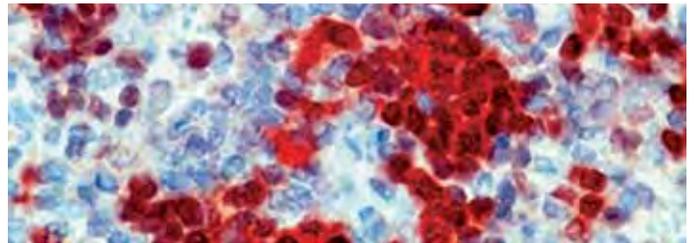
F, P/H

Clone: 2B6

Catalog No.: Mob 341 Concentrated 1ml

Mob 341-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human spleen stained with Cdk2 antibody (Mob 341).

Immunogen: BALB/C mice were injected with a human recombinant cdk2 protein.

Isotype: IgG2b

Positive Control: Tonsil

Cellular Localization: Cytoplasmic, nuclear

Specificity: This antibody reacts with a 33 kDa protein known as cdk2. Cdk-2 complexes with cyclins E, D1 and D3. Cyclin E-cdk2 kinase is active in the G1 and S-phases of the cell cycle and is important (as is Cyclin A-cdk2) for the progression from G1 to S-phase. The levels of cyclin A-cdk2 is maximal at the G1/S transition and both cdk2 and cyclin A are found associated with DNA in the initiation complex during replication.

Monoclonal Mouse Anti-Human

### Cdk5

F, P/H

Clone: DC17 + DC34

Catalog No.: Mob 342 Concentrated 1ml

Mob 342-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with a recombinant cdk5 protein.

Isotype: Both clones, IgG1

Positive Control: Brain

Cellular Localization: Cytoplasmic, nuclear

Specificity: This antibody reacts with a 31 kDa protein known as cdk5. Cdk-5 is expressed in both cycling and noncycling cells and is present in numerous mammalian tissues. Neuronal and muscle cells contain the highest amount of this protein. Cdk5 activity is involved in terminal differentiation of neurons and muscle cells.

Monoclonal Mouse Anti-Human

### Cdk7/ CDK-activating kinase (CAK)

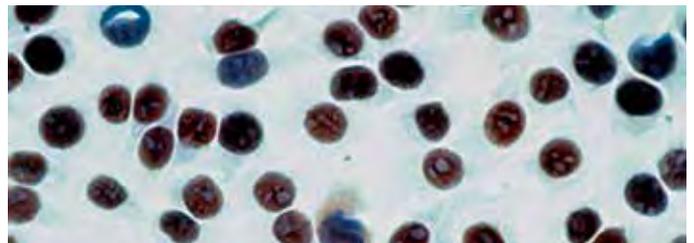
F

Clone: MO-1.1

Catalog No.: Mob 173 Concentrated 1ml

Mob 173-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human cervical cancer cells stained with Cdk7/CAK antibody (Mob 173).

Immunogen: Recombinant human cdk7.

Isotype: IgG2b

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to human CAK (CDK-activating kinase) a 40 kDa protein. Cyclin dependent kinase (CDK) activation is dependent on cyclin binding and phosphorylation of a conserved threonine residue mediated by CDK-activating kinase (CAK).

Monoclonal Mouse Anti-Human

### Cdx2

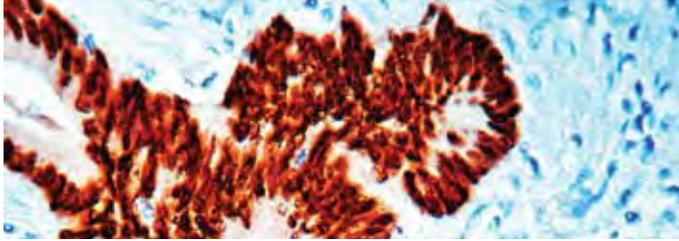
F, P/H

Clone: AMT28

Catalog No.: Mob 432 Concentrated 1ml

Mob 432-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon stained with Cdx2 antibody (Mob 432).

Immunogen: Prokaryotic recombinant protein corresponding to the 180 amino acid N-terminal region of the human cdx2 molecule.

Isotype: IgG1, kappa

Positive Control: Colon cancer

Cellular Localization: Nuclear

Specificity: Cdx2 is a caudal type homeobox gene that encodes an intestine-specific transcription factor that is expressed early in intestinal development and may be involved in the regulation of proliferation and differentiation of intestinal epithelial cells. It is expressed in the nuclei of epithelial cells throughout the intestine, from duodenum to rectum. The cdx2 protein is expressed in primary and metastatic colorectal carcinomas and has also been demonstrated in the intestinal metaplasia of the stomach and intestinal-type gastric cancer, while it is not expressed in the normal gastric mucosa. Studies have shown that cdx2 is superior marker compared to CK20.

Polyclonal Rabbit Anti-Human

### c-erbB-2 Oncoprotein

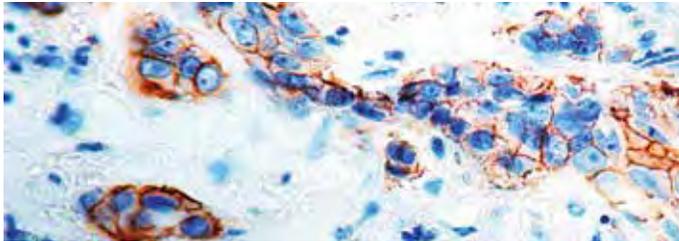
F, P/H

Catalog No.: RP 006 Concentrated 1ml

RP 006-05 Concentrated 0.5ml

PDR 003 Prediluted 6ml

Regulatory Status: ASR



Formalin fixed paraffin embedded human breast carcinoma stained with c-erbB-2 antibody (RP 006).

Immunogen: Keyhole limpet hemocyanin conjugated synthetic human peptide from c-erbB-2 oncoprotein.

Positive Control: Breast carcinoma

Cellular Localization: Cell membrane

Specificity: This antibody reacts with the c-erbB-2 oncoprotein, a 190 kDa protein. The proto-oncogene for c-erbB-2 is located on the human chromosome 17, band 21. It has structural similarities to EGFR. Several studies have indicated that c-erbB-2 may be a good indicator of the prognosis of human carcinomas in the breast, ovary, uterus and gastrointestinal tract.

Monoclonal Rabbit Anti-Human

### c-erbB-2 Oncoprotein

F, P/H

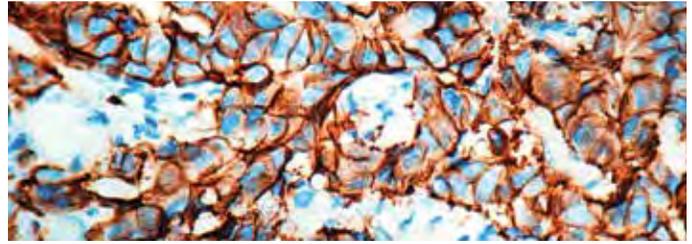
Clone: SP3

Catalog No.: RMAB 008 Concentrated 0.5ml

RMPD 008 Prediluted 6ml

RMPD008-10RM Prediluted 10ml **360**

Regulatory Status: ASR



Formalin fixed paraffin embedded human breast carcinoma stained with c-erbB-2 antibody (RMAB 008).

Immunogen: Recombinant protein encoding extracellular domain of human c-erbB2.

Isotype: IgG

Positive Control: Breast carcinoma

Cellular Localization: Cell membrane

Specificity: This antibody recognizes a c-erbB-2 protein, which is a receptor tyrosine kinase of the c-erbB family. It is closely related in structure to the epidermal growth factor receptor. c-erbB-2 oncoprotein is detectable in a subset of breast and other adenocarcinomas, as well as transitional cell carcinomas. In the case of breast cancer, expression determined by immunohistochemistry has been shown to be associated with poor prognosis.

Polyclonal Rabbit Anti-Human

### Chorionic Gonadotropin (hCG)

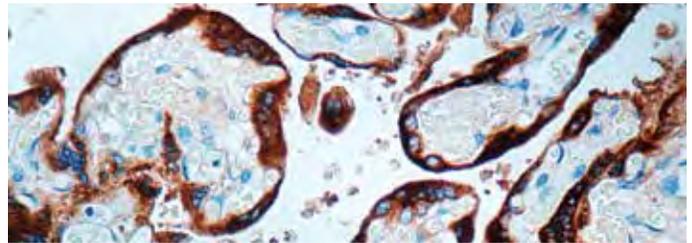
F, P

Catalog No.: RP 007 Concentrated 1ml

RP 007-05 Concentrated 0.5ml

PDR 030 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human placenta stained with hCG antibody (RP 007).

Immunogen:  $\beta$  chain of human chorionic gonadotropin.

Positive Control: Placenta

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with hCG. It stains strongly with the human placenta and placental trophoblasts.

Monoclonal Mouse Anti-Human

### Chromogranin A

Clone: LK2H10

Catalog No.: Mob 048 Concentrated 1ml

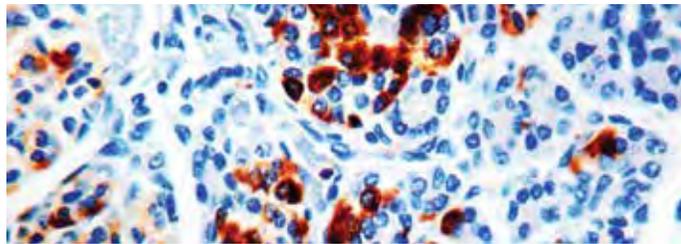
Mob 048-05 Concentrated 0.5ml

PDM 067 Prediluted 6ml

PDM067-10MM Prediluted 10ml **3 6 0**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human pancreas stained with Chromogranin A antibody (PDM 067).

Immunogen: BALB/C mice were immunized with human pheochromocytoma.

Isotype: IgG1, kappa

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: Chromogranin A is a 439 amino acid protein present in secretory granules of a wide variety of endocrine cells and neurons. A positive staining is seen in the secretory granules of parathyroid, adrenal medulla, anterior pituitary gland and Langerhans islets of pancreas. This antibody stains a variety of neuroendocrine tumors.

Polyclonal Rabbit Anti-Human

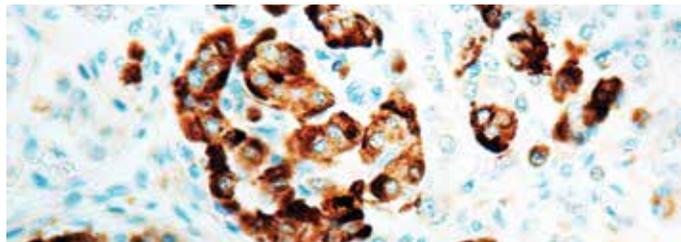
### Chromogranin A

Catalog No.: RP 008 Concentrated 1ml

RP 008-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P/H



Formalin fixed paraffin embedded human pancreas stained with Chromogranin A antibody (RP 008).

Immunogen: C-terminal half of chromogranin A was purified from urine of patients with carcinoid syndrome.

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with human chromogranin A in the neuroendocrine cells and neural tissues. It does not recognize the epitopes located on the N-terminal half of the chromogranin A molecule.

Monoclonal Rabbit Anti-Human

### Chromogranin A

Clone: SP12

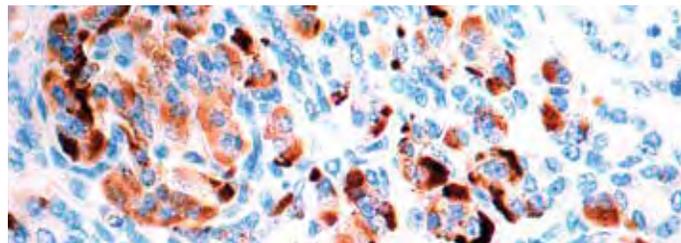
Catalog No.: RMAB 015 Concentrated 0.5ml

RMPD 015 Prediluted 6ml

RMPD015-10RM Prediluted 10ml **3 6 0**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human pancreas stained with Chromogranin A antibody (RMAB 015).

Immunogen: Recombinant protein encoding human Chromogranin A.

Isotype: IgG

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes Chromogranin A. Chromogranin A (a protein of 439 amino acid which is encoded on chromosome 14) is present in neuroendocrine cells throughout the body, including the neuroendocrine cells of the large and small intestine, adrenal medulla and pancreatic islets. It is an excellent marker for carcinoid tumors, pheochromocytomas, paragangliomas, and other neuroendocrine tumors. Coexpression of chromogranin A and neuron specific enolase (NSE) is common in neuroendocrine neoplasms.

Polyclonal Rabbit Anti-Human

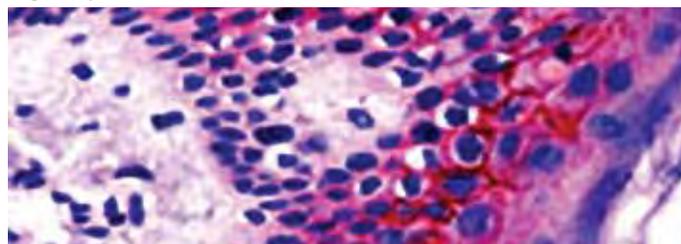
### Claudin 1

Catalog No.: RP 153 Concentrated 1ml

RP 153-05 Concentrated 0.5ml

Regulatory Status: RUO

F, P/H



Formalin fixed paraffin embedded human skin stained with Claudin 1 antibody (RP 153).

Immunogen: A synthetic peptide corresponding to C-terminal of human claudin 1.

Positive Control: Breast carcinoma, skin

Cellular Localization: Cell membrane, cytoplasmic

Specificity: Claudin 1-8 proteins are a family of transmembrane proteins associated with tight junctions. Tight junctions are specialized regions of cell to cell contact, made up of a network of strands to act as a molecular gasket for preventing the leakage of ions, water etc., between cells. They are abundant in luminal epithelial sheets where they maintain epithelial cell polarity. Different tissues exhibit different claudin composition.



DBS offers fluorescein isothiocyanate (FITC) conjugated antibodies for use in a variety of applications such as immunohistochemistry, fluorescence microscopy and flow cytometry.

Visit us at [dbiosys.com](http://dbiosys.com) for more about our FITC Conjugated Antibodies.

Polyclonal Rabbit Anti-Human

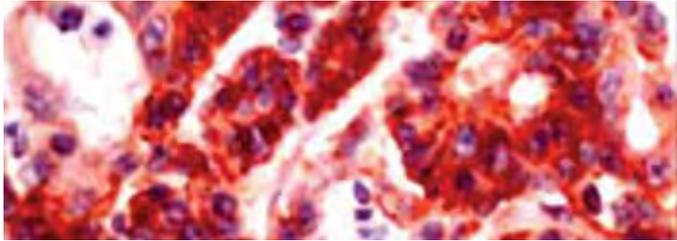
### Claudin 2

F, P/H

Catalog No.: RP 154 Concentrated 1ml

RP 154-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human colon carcinoma stained with Claudin 2 antibody (RP 154).

Immunogen: A synthetic peptide corresponding to C-terminal of human claudin 2.

Positive Control: Ovarian carcinoma, Tonsil, Colon carcinoma

Cellular Localization: Cell membrane, cytoplasmic

Specificity: Claudin 1-8 proteins are a family of transmembrane proteins associated with tight junctions. Tight junctions are specialized regions of cell to cell contact, made up of a network of strands to act as a molecular gasket for preventing the leakage of ions, water etc., between cells. They are abundant in luminal epithelial sheets where they maintain epithelial cell polarity. Different tissues exhibit different claudin composition.

Polyclonal Rabbit Anti-Human

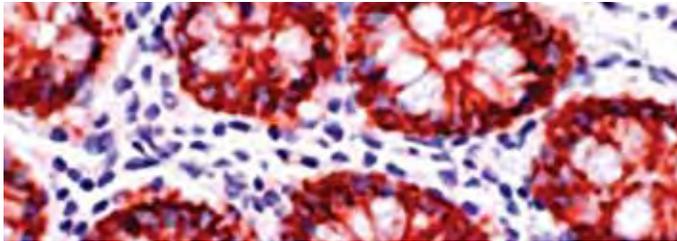
### Claudin 3

F, P/H

Catalog No.: RP 155 Concentrated 1ml

RP 155-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human small intestine stained with Claudin 3 antibody (RP 155).

Immunogen: A synthetic peptide corresponding to C-terminal of human claudin 3.

Positive Control: Small intestine

Cellular Localization: Cell membrane, cytoplasmic

Specificity: Claudin 1-8 proteins are a family of transmembrane proteins associated with tight junctions. Tight junctions are specialized regions of cell to cell contact, made up of a network of strands to act as a molecular gasket for preventing the leakage of ions, water etc., between cells. They are abundant in luminal epithelial sheets where they maintain epithelial cell polarity. Different tissues exhibit different claudin composition.

Polyclonal Rabbit Anti-Human

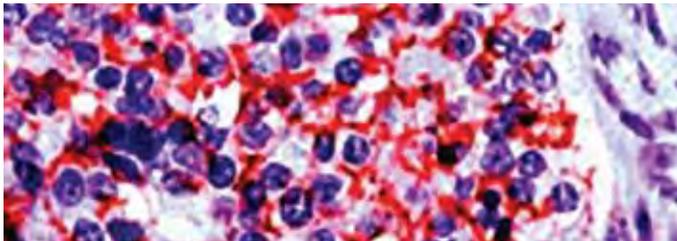
### Claudin 4

F, P/H

Catalog No.: RP 156 Concentrated 1ml

RP 156-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human ovarian carcinoma stained with Claudin 4 antibody (RP 156).

Immunogen: A synthetic peptide corresponding to C-terminal of human claudin 4.

Positive Control: Ovarian carcinoma, tonsil

Cellular Localization: Cell membrane, cytoplasmic

Specificity: Claudin 1-8 proteins are a family of transmembrane proteins associated with tight junctions. Tight junctions are specialized regions of cell to cell contact, made up of a network of strands to act as a molecular gasket for preventing the leakage of ions, water etc., between cells. They are abundant in luminal epithelial sheets where they maintain epithelial cell polarity. Different tissues exhibit different claudin composition.

Polyclonal Rabbit Anti-Human

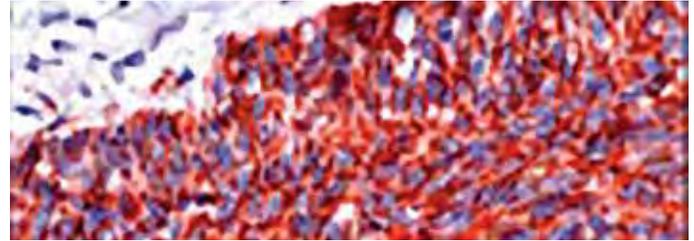
### Claudin 5

F, P/H

Catalog No.: RP 157 Concentrated 1ml

RP 157-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human colon with Claudin 5 antibody (RP 157).

Immunogen: A synthetic peptide corresponding to C-terminal of human claudin 5.

Positive Control: Lung

Cellular Localization: Cell membrane, cytoplasmic

Specificity: Claudin 1-8 proteins are a family of transmembrane proteins associated with tight junctions. Tight junctions are specialized regions of cell to cell contact, made up of a network of strands to act as a molecular gasket for preventing the leakage of ions, water, etc., between cells. They are abundant in luminal epithelial sheets where they maintain epithelial cell polarity. Different tissues exhibit different claudin composition.

Monoclonal Mouse Anti-Human

### c-myc

F, P

Clone: 9E10

Catalog No.: Mob 231 Concentrated 1ml

Mob 231-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Synthetic peptide corresponding to residues 408-439 of the human p62c-myc protein.

Isotype: IgG1

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: This antibody recognizes an epitope located in the amino acid residue 410-419 of human oncogene product c-myc. This antibody reacts with both components of the p62 and p64 c-myc.

Monoclonal Mouse Anti-Human

### Collagen Type IV

F, P/E

Clone: COL-94

Catalog No.: Mob 229 Concentrated 1ml

Mob 229-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Human collagen type IV.

Isotype: IgG1

Positive Control: Skin

Cellular Localization: Basement membrane

Specificity: This antibody recognizes collagen type IV epitope located on the  $\alpha 1$  and/or  $\alpha 2$  chains of human collagen type IV. This antibody shows no cross-reactivity with collagen types I, II, III, V, VI and VII and does not react with human vitronectin, fibronectin or chondroitin sulfate A, B and C.

Polyclonal Rabbit Anti-Human

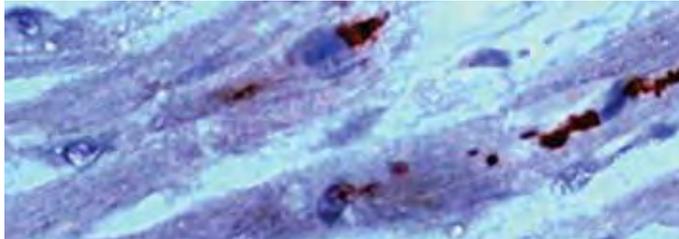
### Connexin 43

F, P/H

Catalog No.: RP 159 Concentrated 1ml

RP 159-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human heart stained with Connexin 43 antibody (RP 159).

**Immunogen:** A synthetic peptide corresponding to a segment of the 3rd cytoplasmic domain of rat connexin 43.

**Positive Control:** Heart

**Cellular Localization:** Cytoplasmic

**Specificity:** The connexins are a group of gap junction proteins, which form a hexamer to compose a connexon. Clusters of connexons form a gap junction through which low molecular weight proteins may diffuse from cell to cell. Connexins are also thought to be essential for the development of labor contractions.

Polyclonal Rabbit Anti-Human

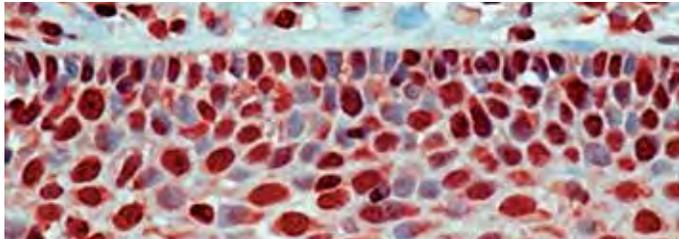
### Cullin-1 (CUL-1)

F, P

Catalog No.: RP 069 Concentrated 1ml

RP 069-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human tonsil stained with Cullin-1 antibody (RP 069).

**Immunogen:** A peptide derived from the C-terminus region of human cullin-1.

**Positive Control:** Tonsil

**Cellular Localization:** Nuclear

**Specificity:** This antibody reacts with an 86kDa protein, known as cullin-1. Cullin-1 is a member of the family of human cullin genes (CUL-1, -2, -3, -4a, -4b and -5) homologous to the *S. cerevisiae* cdc53 gene. CUL-1 forms a complex with human p19skp1 and F box protein p45skp2, which controls the proteolysis of G1 cell cycle regulatory proteins.

Polyclonal Rabbit Anti-Human

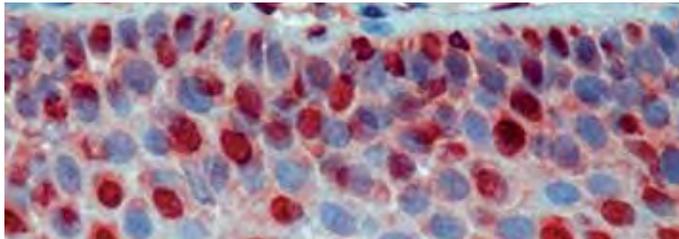
### Cullin-2 (CUL-2)

F, P/H

Catalog No.: RP 070 Concentrated 1ml

RP 070-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human tonsil stained with Cullin-2 antibody (RP 070).

**Immunogen:** A peptide derived from the C-terminus region of human cullin-2.

**Positive Control:** Tonsil

**Cellular Localization:** Nuclear

**Specificity:** This antibody reacts with a 76kDa protein, known as cullin-2. Cullin-2 is a member of the family of human cullin genes (CUL-1, -2, -3, -4a, -4b and -5) homologous to the *S. cerevisiae* cdc53 gene. CUL-1 forms a complex with human p19skp1 and F box protein p45skp2, which controls the proteolysis of G1 cell cycle regulatory proteins. In contrast to CUL-1, CUL-2 does not associate with p19skp1 and p45skp2. CUL-2 forms a complex with an inactive transcriptional elongation complex, SIII, formed by three subunits: elongin C, elongin B and VHL.

Monoclonal Mouse Anti-Human

### Cyclin A Protein

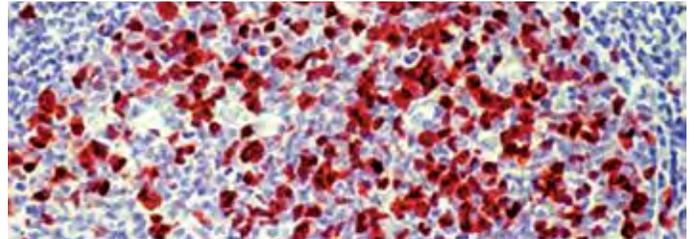
F, P/H

Clone: 6E6

Catalog No.: Mob 175 Concentrated 1ml

Mob 175-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cyclin A antibody (Mob 175).

**Immunogen:** Synthetic peptide corresponding to the N-terminal fragment of cyclin A protein.

**Isotype:** IgG1, kappa

**Positive Control:** Tonsil

**Cellular Localization:** Nuclear

**Specificity:** This antibody may be used to examine the biological behavior of tumors. Cyclins are proteins that vary in abundance and are associated with and activate cyclin dependent kinases at different stages of the cell cycle. Cyclin A is detectable in S phase increasing during progression into G2 phase. Increased expression of various cyclins have been noted in some human cancers.

Polyclonal Rabbit Anti-Human

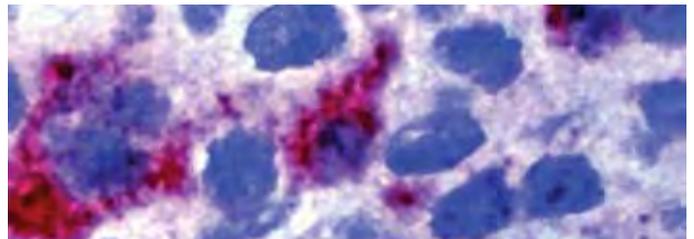
### Cyclin B1

F, P/H

Catalog No.: RP 137 Concentrated 1ml

RP 137-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast carcinoma stained with Cyclin B1 antibody (RP 137).

**Immunogen:** A synthetic peptide derived from C-terminus of human cyclin B1 protein.

**Positive Control:** Breast carcinoma

**Cellular Localization:** Cytoplasmic

**Specificity:** In mammals, cyclin B associates with inactive p34cdc2, which facilitates phosphorylation of p34cdc2 at aa 14Thr and 15Tyr. This maintains the inactive state until the end of G2-phase. The inactive cyclin B-p34cdc2 complex continues to accumulate in the cytoplasm until the completion of DNA synthesis, when cdc25, a specific protein phosphatase, dephosphorylates aa 14Thr and 15Tyr of p34cdc2 rendering the complex active at the G2/M boundary. This mitotic kinase complex remains active until the metaphase/anaphase transition when cyclin B is degraded. This degradation process is ubiquitin-dependent and is necessary for the cell to exit mitosis. So, cyclin B-p34cdc2 plays a critical role in G2 to M transition.

Monoclonal Mouse Anti-Human

### Cyclin B1

F, P/H

Clone: V152

Catalog No.: Mob 264 Concentrated 1ml

Mob 264-05 Concentrated 0.5ml

Regulatory Status: IVD

**Immunogen:** BALB/C mice were injected with hamster cyclin B1 protein.

**Isotype:** IgG1

**Positive Control:** Breast carcinoma

**Cellular Localization:** Cytoplasmic

**Specificity:** This antibody is specific to a protein of 62 kDa identified as cyclin B1. Cyclin B1 expression is restricted to a specific short period of the cell cycle with cyclin B1 expression detected earlier and peaking in concentration before cyclin B2 expression. In a majority of tumors, positive staining with cyclin B corresponds to the proliferative status of the tumor.

Monoclonal Mouse Anti-Human

### Cyclin D1

Clone: DCS-6

Catalog No.: Mob 178 Concentrated 1ml

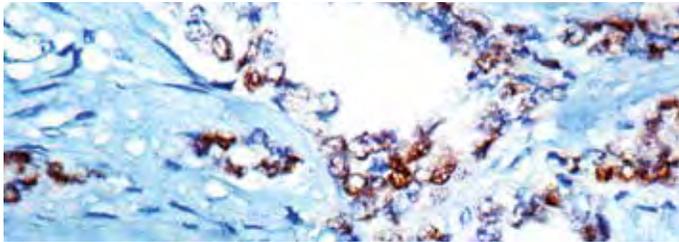
Mob 178-05 Concentrated 0.5ml

PDM 046 Prediluted 6ml

PDM046-10MM Prediluted 10ml **360**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded breast carcinoma stained with Cyclin D1 antibody (Mob 178).

Immunogen: Prokaryotic recombinant fusion protein corresponding to human cyclin D1.

Isotype: IgG2a

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to human cyclin D1. The cyclin D1 gene is located on 11q13 and has been shown to be amplified in a variety of tumors. Maximum expression of cyclin D1 occurs at a critical point in mid to late G1 phase of the cell cycle.

Monoclonal Rabbit Anti-Human

### Cyclin D1

Clone: SP4

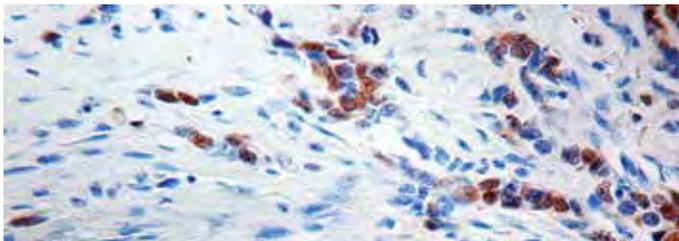
Catalog No.: RMAB 003 Concentrated 0.5ml

RMPD 003 Prediluted 6ml

RMPD003-10RM Prediluted 10ml **360**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded breast carcinoma stained with Cyclin D1 antibody (RMAB 003).

Immunogen: A synthetic peptide from C-terminus of human cyclin D1.

Isotype: IgG

Positive Control: Breast Carcinoma

Cellular Localization: Nuclear

Specificity: Cyclin D1 or PRAD-1 or bcl-1 is one of the key cell cycle regulators, and functions in association with cdk4 and/or cdk6 by phosphorylating the Rb protein. It is a putative proto-oncogene overexpressed in a wide variety of human neoplasms including mantle cell lymphomas (MCL).

Monoclonal Rabbit Anti-Human

### Cyclin D1

Clone: BV2

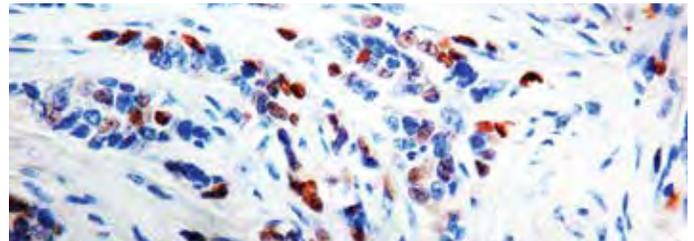
Catalog No.: RMAB 023 Concentrated 0.5ml

RMPD 023 Prediluted 6ml

RMPD023-10RM Prediluted 10ml **360**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast carcinoma stained with Cyclin D1 (RMPD 023).

Immunogen: A synthetic cyclic peptide from the antigen C-terminus.

Isotype: IgG

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: Cyclins are a family of proteins involved in the progression of cells through the cell cycle. A cyclin forms a complex with its partner cyclin-dependent kinase (cdk), which activates the latter's protein kinase function. Cyclins are so named because they are produced or degraded as needed in order to drive the cell through the different stages of the cell cycle. When its concentrations in the cell are low, the cyclin detaches from the cdk, inhibiting the enzyme's activity, probably by causing a protein chain to block the enzymatic site. Cyclin D1 or PRAD-1 or bcl-1 is one of the key cell cycle regulators, and functions in association with cdk4 and/or cdk6 by phosphorylating the Rb protein. It is a putative proto-oncogene overexpressed in a wide variety of human neoplasms including mantle cell lymphomas (MCL).

Polyclonal Rabbit Anti-Human

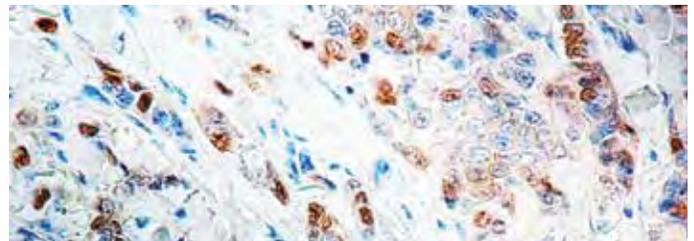
### Cyclin D1/bcl-1

Catalog No.: RP 120 Concentrated 1ml

RP 120-05 Concentrated 0.5ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded breast carcinoma stained with Cyclin D1 antibody (RP 120).

Immunogen: A synthetic peptide from C-terminus of human cyclin D1.

Positive Control: Breast carcinoma, mantle cell lymphoma

Cellular Localization: Nuclear

Specificity: This antibody reacts with a 36 kDa protein. Cyclin D1 or PRAD-1 or bcl-1 is one of the key cell cycle regulators and functions in association with cdk4 and/or cdk6 by phosphorylating the Rb protein. It is a putative proto-oncogene overexpressed in a wide variety of human neoplasms including mantle cell lymphomas (MCL).

Monoclonal Mouse Anti-Human

### Cyclin D2

Clone: DCS-3.1

Catalog No.: Mob 179 Concentrated 1ml

Mob 179-05 Concentrated 0.5ml

F

Regulatory Status: IVD

Immunogen: Prokaryotic recombinant protein corresponding to full length cyclin D2.

Isotype: IgG2a

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to human cyclin D2. Overexpression of cyclin D2 leads to acceleration of the G1 phase. The expression of human cyclin D2 protein is more restricted than that of cyclin D1.

Monoclonal Mouse Anti-Human

### Cyclin D3

F, P/H

Clone: DCS-22

Catalog No.: Mob 265-1 Concentrated 1ml

Mob 265-1-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Purified prokaryotic recombinant protein corresponding to full length human cyclin D3.

Isotype: iGg1, Kappa

Positive Control: Breast carcinoma, Tonsil

Cellular Localization: Nuclear

Specificity: This antibody is specific to a 34 kD protein identified as cyclin D3. It shows no cross reactivity with recombinant human cyclin D1 or cyclin D2. Cyclin D3 can phosphorylate pRB when associated with cdk4 and/or cdk6.

Monoclonal Mouse Anti-Human

### Cyclin E Protein

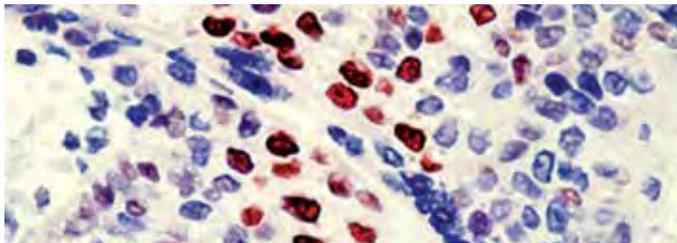
F, P/H

Clone: 13A3

Catalog No.: Mob 181 Concentrated 1ml

Mob 181-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast carcinoma stained with Cyclin E antibody (Mob 181).

Immunogen: Synthetic peptide corresponding to the full length cyclin E molecule.

Isotype: IgG2a, kappa

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: Cyclin proteins are a family of related proteins, which control the progression of the eukaryotic cell cycle. Overexpression of cyclin E shortens the length of the G1 phase, accelerating progression of S phase. The activity of cyclin E is mediated through its activation of cyclin dependent kinase 2 (cdk2) protein and is modulated by the presence of tumor suppressor proteins such as p16.

Monoclonal Mouse Anti-Human

### Cyclin E Protein

F, P/H

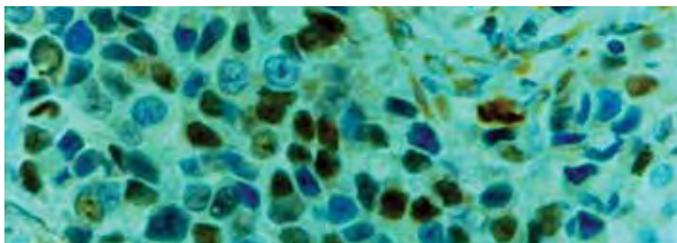
Clone: HE12

Catalog No.: Mob 266 Concentrated 1ml

Mob 266-05 Concentrated 0.5ml

PDM 145 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast carcinoma stained with Cyclin E antibody (Mob 266).

Immunogen: Synthetic peptide corresponding to human cyclin E protein.

Isotype: IgG1

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: This antibody recognizes a doublet of 50 kDa and a single band of 42 kDa identified as cyclin E. Cyclin proteins are a family of related proteins, which control the progression of the eukaryotic cell cycle. Overexpression of cyclin E shortens the length of the G1 phase, accelerating progression of S phase. The activity of cyclin E is mediated through its activation of cyclin dependent kinase 2 (cdk2) protein and is modulated by the presence of tumor suppressor proteins such as p16.

Monoclonal Rabbit Anti-Human

### Cyclooxygenase-2 (COX-2)

F, P/H

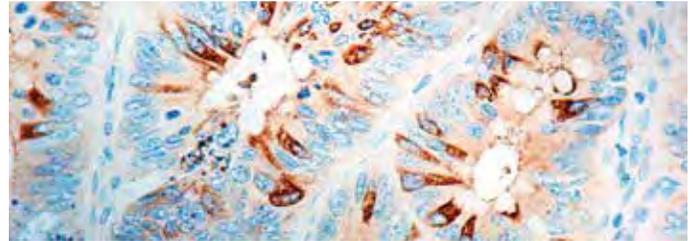
Clone: SP21

Catalog No.: RMAB 006 Concentrated 0.5ml

RMPD 006 Prediluted 6ml

RMPD006-10RM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded colon carcinoma stained with COX-2 antibody (RMAB 006).

Immunogen: Synthetic peptide corresponding to C-terminus of COX2.

Isotype: IgG

Positive Control: Lung carcinoma, colon carcinoma

Cellular Localization: Cytoplasmic, membrane

Specificity: COX-2 (Cyclooxygenase-2) is an inducible enzyme. It is involved in the response of cells to growth factors, tumor promoters, and cytokines that induce its expression. Given its role in synthesizing prostaglandins, COX-2 is therefore of interest in studying immune response regulation. COX-2 is induced by a wide variety of stimuli and was initially identified as immediate-early growth response gene. In addition, COX-2 expression markedly increased in 85-90% of human colorectal adenocarcinoma whereas COX-1 levels remained unchanged.

Polyclonal Rabbit Anti-Human

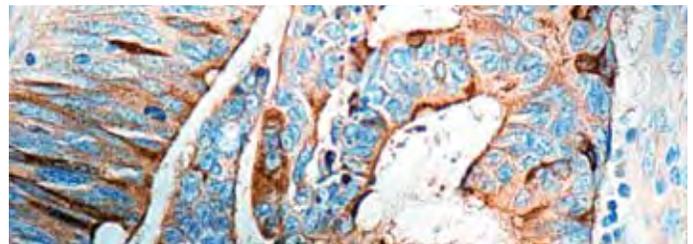
### Cyclooxygenase-2 (COX-2)

F, P/H

Catalog No.: RP 111 Concentrated 1ml

RP 111-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded colon carcinoma stained with COX-2 antibody (RP 111).

Immunogen: Recombinant protein corresponding to C-terminus of rat COX2.

Positive Control: Lung and colon carcinoma

Cellular Localization: Cytoplasmic, membrane

Specificity: This antibody reacts with a 70 kDa protein. COX-2 (Cyclooxygenase-2) is an inducible enzyme. It is involved in the response of cells to growth factors, tumor promoters and cytokines that induce its expression. COX-2 expression markedly increased in 85-90% of human colorectal adenocarcinoma whereas COX-1 levels remained unchanged.

Monoclonal Mouse Anti-Human  
**Cyclooxygenase-2 (COX-2)**

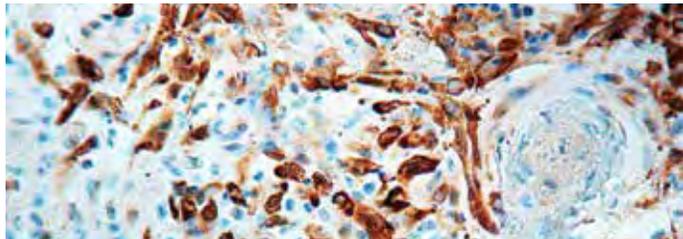
F, P/H

Clone: 4H12

Catalog No.: Mob 413 Concentrated 1ml

Mob 413-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded colon carcinoma stained with COX-2 antibody (Mob 413).

Immunogen: Prokaryotic recombinant protein corresponding to amino acids 30 to 163 of the N-terminus of the human COX-2 molecule.

Isotype: IgG1

Positive Control: Colon cancer

Cellular Localization: Cytoplasmic

Specificity: COX-2 is a mitogen-inducible form of cyclooxygenase, which is expressed in response to various inflammatory stimuli. COX-2 staining increases in the more differentiated, suprabasal keratinocytes of normal skin. COX-2 is expressed in epithelial and interstitial cells of adenomatous polyps and colon adenocarcinomas.

Monoclonal Mouse Anti-Human

**Cystatin A**

F, P

Clone: WR-23/2/3/3

Catalog No.: Mob 409 Concentrated 1ml

Mob 409-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Human Cystatin A.

Isotype: IgG1

Positive Control: Brain

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with 11-13 kDa protein, Cystatin A. Cystatins are endogenous inhibitors of lysosomal proteases that form a superfamily, which is classified into 1, 2, and 3 families. Cystatin A is thought to be a tumor suppressor, since an inverse correlation seems to exist between the level of Cystatin A and tumor progression. Cystatin A has been implicated in aging of tissues, Alzheimer disease, viral infection and inflammatory processes.

Monoclonal Mouse Anti-Human

**Cystic Fibrosis Transmembrane Regulator (CFTR)**

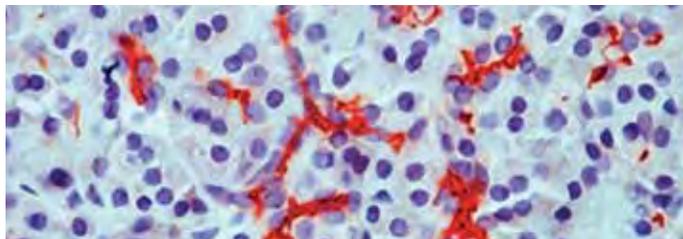
F, P/H

Clone: M3A7

Catalog No.: Mob 378 Concentrated 1ml

Mob 378-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human pancreas stained with CFTR antibody (Mob 378).

Immunogen: BALB/C mice were immunized with recombinant protein encoding NBF2 domain of human CFTR.

Isotype: IgG1

Positive Control: Pancreas

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a protein of 165-170 kDa. Cystic fibrosis transmembrane regulator (CFTR) is composed of two membrane-spanning domains (MSD), two nucleotide-binding domains (NBD) and one R domain. It is structurally similar to multidrug resistance protein (Mdr1). CFTR is found in the apical membranes of epithelia within the pancreas, intestine, bile duct, sweat gland and male genital ducts. CFTR is a valuable marker of human pancreatic duct cell development and differentiation.

Monoclonal Mouse Anti-Human

**Cytokeratin**

F, P/H

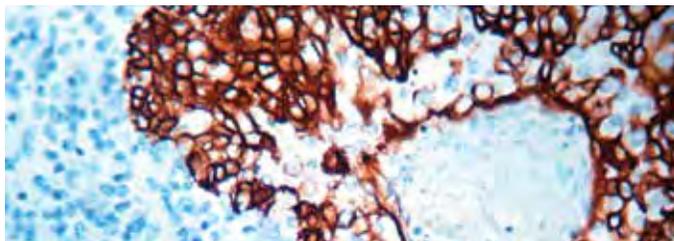
Catalog No.: Mob 052 Concentrated 1ml

Mob 052-05 Concentrated 0.5ml

PDM 116 Prediluted 6ml

PDM116-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin antibody (PDM 116).

Immunogen: BALB/C mice were immunized with crude extract of splenic cells from a nude mouse engrafted with MCF-7 cells.

Isotype: IgG1, kappa

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes cytokeatin polypeptides ranging from 40 through 58kDa, corresponding to cytokeatins 5, 6, 8,17 and 19. It shows a broad pattern of reactivity with human epithelial tissues from simple glandular epithelia to stratified squamous epithelia, like epidermis, mammary gland ducts and tracheal epithelium.

Monoclonal Mouse Anti-Human

**Cytokeratin AE1, Acidic**

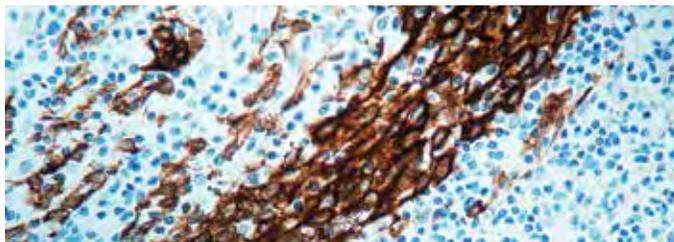
F, P/E

Clone: AE1

Catalog No.: Mob 092 Concentrated 1ml

PDM 043 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin AE1 antibody (Mob 092).

Immunogen: BALB/C mice were immunized with human epidermal keratin.

Isotype: IgG1, kappa

Positive Control: Skin

Cellular Localization: Cytoplasm

Specificity: This antibody recognizes most of the acidic (Type I) keratins. It recognizes keratin polypeptides of 50 and 56.5 kDa. In keratinized epidermis, 50 kDa keratin is present in the basal layer, while 56.5 kDa keratin is present in suprabasal layers. This antibody can be used to stain distinct cell layers in an epithelial tissue and various neoplasms of epithelial origin.

Monoclonal Mouse Anti-Human

**Cytokeratin AE3, Basic**

Clone: AE3

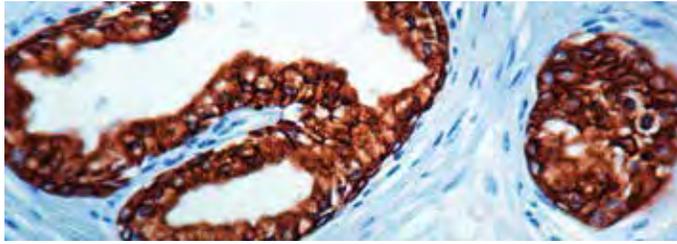
Catalog No.: Mob 093 Concentrated 1ml

PDM 044 Prediluted 6ml

PDM044-10MM Prediluted 10ml **360**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human prostate carcinoma stained with Cytokeratin AE3 antibody (Mob 093).

Immunogen: BALB/C mice were immunized with human epidermal keratin.

Isotype: IgG1, kappa

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes most of the basic (Type II) keratins. It recognizes keratin polypeptides of 58 and 65 to 67 kDa. In keratinized epidermis, 58 kDa keratin is present in the basal and suprabasal layers, while 65 to 67 kDa keratin is present in the cells above the basal layers. This antibody can be used to stain different cell layers in an epithelial tissue and various neoplasms of epithelial origin.

Monoclonal Mouse Anti-Human

**Cytokeratin AE1/AE3**

Clone: AE1 + AE3

Catalog No.: Mob 190 Concentrated 1ml

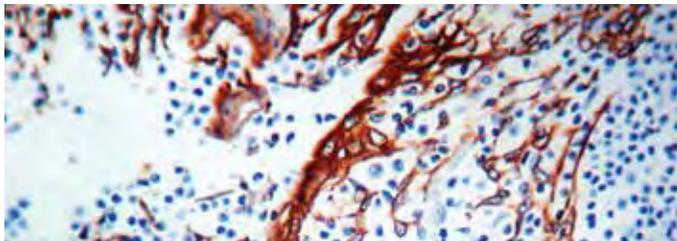
Mob 190-05 Concentrated 0.5ml

PDM 072 Prediluted 6ml

PDM072-10MM Prediluted 10ml **360**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin AE1/AE3 (PDM 072).

Immunogen: BALB/C mice were immunized with human epidermal keratin.

Isotype: AE1, IgG1, kappa; AE3, IgG1, kappa

Positive Control: Skin, Tonsil

Cellular Localization: Cytoplasmic

Specificity: This AE1/AE3 antibody cocktail recognizes most of the acidic (Type I) keratins as well as basic (Type II). It recognizes keratin polypeptides of 40, 48, 50, 52, 54, 56.5, 58, 59 and 64 to 67 kDa. In keratinized epidermis, 50 kDa keratin is present in the basal layer, while 56.5 kDa keratin is present in suprabasal layers. 58 kDa keratin is present in the basal and suprabasal layers, while 65 to 67 kDa keratin is present in the cells above the basal layers. This antibody can be used to stain distinct cell layers in an epithelial tissue and various neoplasms of epithelial origin.

Monoclonal Mouse Anti-Human

**Cytokeratin 4**

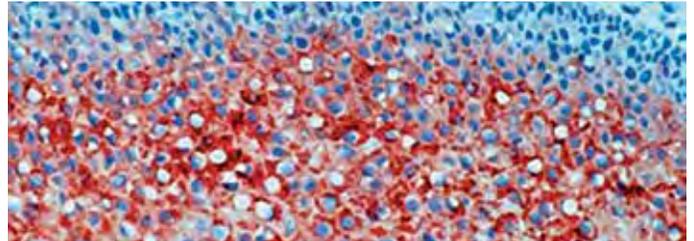
Clone: 6B10

Catalog No.: Mob 302 Concentrated 1ml

Mob 302-05 Concentrated 0.5ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin 4 antibody (Mob 302).

Immunogen: Cytokeratin purified from human esophagus.

Isotype: IgG1

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 59 kDa protein. Cytokeratin 4 belongs to the type B (basic) subfamily of high molecular weight cytokeratins and exists in combination with cytokeratin 13. Cytokeratin 4 is primarily found in the non-cornifying squamous epithelium, i.e. superficial and intermediate epithelial cells of esophagus, ectocervix, tongue, vagina, larynx, pharynx, epiglottis, anus and cornea. Cytokeratin 4 may be detected in squamous cell carcinomas derived from several non-cornified epithelia.

Monoclonal Rabbit Anti-Human

**Cytokeratin 5**

Clone: BV8

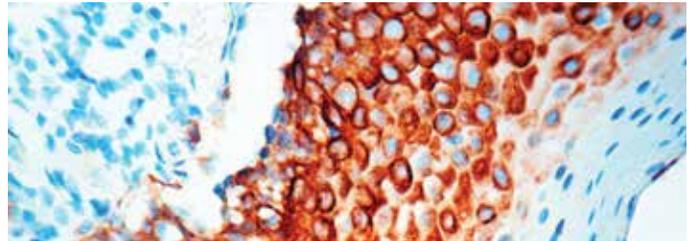
Catalog No.: RMAB 029 Concentrated 0.5ml

RMPD 029 Prediluted 6ml

RMPD029-10RM Prediluted 10ml **360**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin 5 antibody (RMAB 029).

Immunogen: A synthetic peptide from the C-terminus of human cytokeratin 5.

Isotype: IgG

Positive Control: Mesothelioma, Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with cytokeratin 5 intermediate filament protein. Basal cells of human epidermis express acidic cytokeratin 14 and basic cytokeratin 5. Cytokeratin 5 is a 58 kDa protein, which is closely related to cytokeratin 6. Cytokeratin 5 and 6 are expressed in basal cell epithelioma, basal cells of prostate, urothelium, vagina, squamous cell carcinomas of skin, tongue, epiglottis and rectal-anal region. Cytokeratin 5 can be useful in the distinction of mesotheliomas from most adenocarcinomas.

Monoclonal Mouse Anti-Human

### Cytokeratin 5

Clone: XM26

Catalog No.: Mob 361 Concentrated 1ml

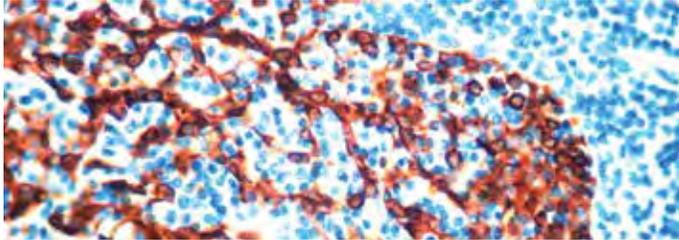
Mob 361-05 Concentrated 0.5ml

PDM 139 Prediluted 6ml

PDM139-10MM Prediluted 10ml **360**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin 5 (PDM 139).

Immunogen: BALB/C mice were injected with prokaryotic recombinant protein corresponding to 103 amino acid portion of C-terminal region of the human cytokeratin 5 molecule.

Isotype: IgG1, kappa

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with cytokeratin 5 intermediate filament protein. Basal cells of human epidermis express acidic cytokeratin 14 and basic cytokeratin 5. Cytokeratin 5 is a 58 kDa protein, which is closely related to cytokeratin 6. Cytokeratin 5 and 6 are expressed in basal cell epithelioma, basal cells of prostate, urothelium, vagina, squamous cell carcinomas of skin, tongue, epiglottis and rectal-anal region. Cytokeratin 5 can be useful in the distinction of mesotheliomas from most adenocarcinomas.

Monoclonal Mouse Anti-Human

### Cytokeratin 5/6

Clone: D5/16 B4

Catalog No.: Mob 362 Concentrated 1ml

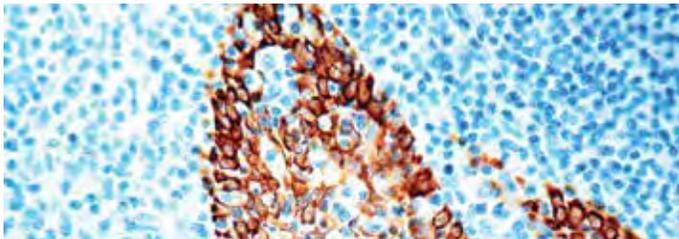
Mob 362-05 Concentrated 0.5ml

PDM 123 Prediluted 6ml

PDM123-10MM Prediluted 10ml **360**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin 5/6 antibody (PDM 123).

Immunogen: BALB/C mice were injected with cytokeratin 5.

Isotype: IgG1, kappa

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: Cytokeratin 5 (58 kDa) is a high molecular weight, basic type of cytokeratin expressed in basal, intermediate and superficial cell layers of stratified epithelia as well as transitional epithelia, complex epithelia and in mesothelial cells and mesothelioma. Cytokeratin 6 (56 kDa) is also a high molecular weight, basic type cytokeratin expressed by proliferating squamous epithelium often paired with cytokeratin 16.

Monoclonal Mouse Anti-Human

### Cytokeratin 5/14

Clone: XM26 + LL002

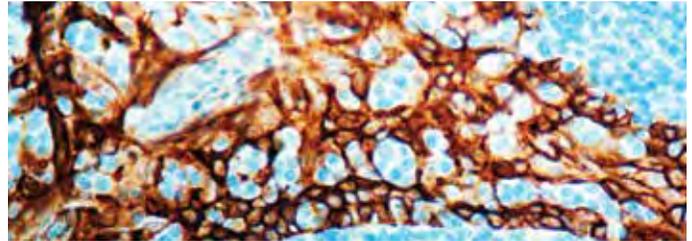
Catalog No.: Mob 433 Concentrated 1ml

Mob 433-05 Concentrated 0.5ml

PDM 140 Prediluted 6ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin 5/14 (Mob 433).

Immunogen: XM26: prokaryotic recombinant protein corresponding to 103 amino acid portion of C-terminal region of the human cytokeratin 5 molecule. LL002: Synthetic peptide of the extreme C-terminal of human keratin-14.

Isotype: XM26, IgG1; LL002, IgG3

Positive Control: Skin, Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody cocktail reacts with cytokeratin 5 intermediate filament protein as well as the 50 kDa cytokeratin protein designated cytokeratin 14. Basal cells of human epidermis express acidic cytokeratin 14 and basic cytokeratin 5. Cytokeratin 5 is a 58 kDa protein, which is closely related to cytokeratin 6. Cytokeratin 5 and 6 are expressed in basal cell epithelioma, basal cells of prostate, urothelium, vagina, squamous cell carcinomas of skin, tongue, epiglottis and rectal-anal region. Cytokeratin 5 can be useful in the distinction of mesotheliomas from most adenocarcinomas.

Cytokeratin 14 belongs to the type A (acidic) subfamily of low MW cytokeratins and exists in combination with cytokeratin 15. This antibody can be useful to distinguish stratified epithelial cells from simple epithelial cells.

Monoclonal Mouse Anti-Human

### Cytokeratin 6

Clone: LHK6B

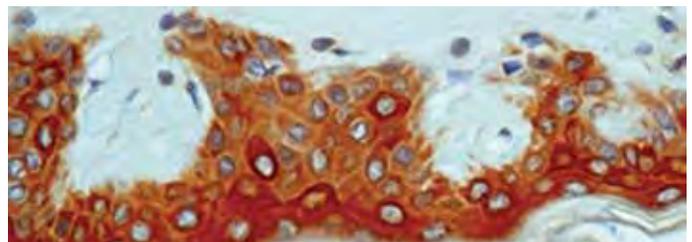
Catalog No.: Mob 271 Concentrated 1ml

Mob 271-05 Concentrated 0.5ml

PDM 135 Prediluted 6ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with Cytokeratin 6 antibody (Mob 271).

Immunogen: BALB/C mice were injected with a synthetic peptide (GSSTIKYTTTS) from the C-terminus of human cytokeratin 6.

Isotype: IgG2a

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to a 56 kDa protein, which is identified as cytokeratin 6. Cytokeratin 6 and 16 are expressed in keratinocytes undergoing hyper proliferation. Cytokeratin is found in hair follicles, suprabasal cells of a variety of internal stratified epithelia. Cytokeratin 6 is strongly expressed in about 75% of head and neck squamous cell carcinomas.

Monoclonal Mouse Anti-Human

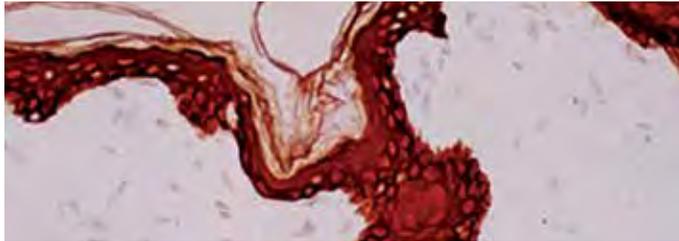
**Cytokeratin 6/18**

Clone: LP34

Catalog No.: Mob 051 Concentrated 1ml  
Mob 051-05 Concentrated 0.5ml

F, P/E

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with Cytokeratin 6/18 antibody (Mob 051).

Immunogen: BALB/C mice were immunized with human keratin.

Isotype: IgG1, kappa

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes keratin polypeptides of 45 and 56 kDa. It shows a broad pattern of reactivity with human epithelial tissues from simple glandular epithelia to stratified squamous epithelia. This antibody is of value in the identification of tumor cells as being of epithelial or less commonly of mesothelial origin.

Monoclonal Mouse Anti-Human

**Cytokeratin 7**

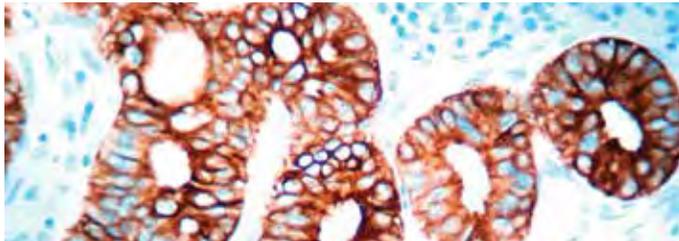
Clone: OV-TL 12/30

Catalog No.: Mob 057 Concentrated 1ml  
Mob 057-05 Concentrated 0.5ml  
PDM 097 Prediluted 6ml  
PDM097-10MM Prediluted 10ml

F, P/H

360

Regulatory Status: IVD



Formalin fixed paraffin embedded human lung stained with Cytokeratin 7 antibody (PDM 097).

Immunogen: BALB/C mice were immunized with ovarian carcinoma cell line, OTN11.

Isotype: IgG1, kappa

Positive Control: Skin, Lung

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes keratin polypeptide of 54 kDa. It stains a number of epithelial cells including ductal and glandular epithelia. Stratified squamous epithelia are positive but transitional epithelium of the urinary tract does not show any staining. This antibody labels adenocarcinomas and transitional carcinomas but does not react with squamous cell carcinomas.

Monoclonal Mouse Anti-Human

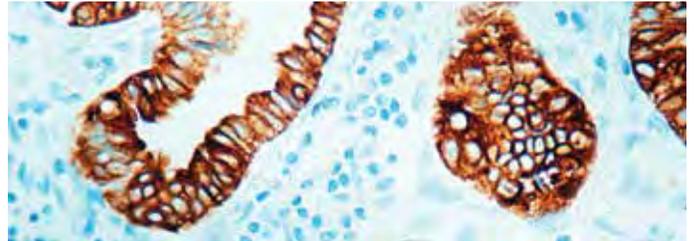
**Cytokeratin 7**

Clone: LDS-68

Catalog No.: Mob 448 Concentrated 1ml  
Mob 448-05 Concentrated 0.5ml

F, P/E

Regulatory Status: IVD



Formalin fixed paraffin embedded human lung stained with Cytokeratin 7 antibody (Mob 448).

Immunogen: BALB/C mice were immunized with human bladder carcinoma cell line, RT4.

Isotype: IgG1, kappa

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes keratin polypeptide of 54 kDa. This antibody reacts specifically with most simple epithelial cells but shows no reaction with epithelial cells in the intestine or stomach. Cholangiocellular carcinoma, ductal carcinoma of breast and transitional carcinoma of urinary bladder are positive but colorectal adenocarcinoma and hepatocellular carcinoma does not show any staining.

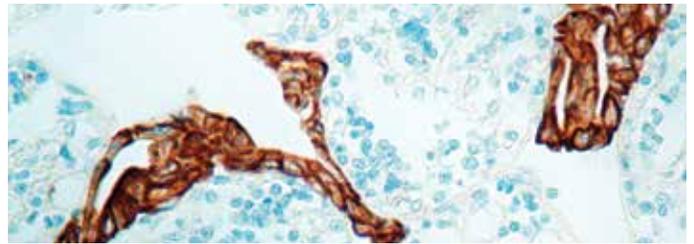
Polyclonal Rabbit Anti-Human

**Cytokeratin 8**

Catalog No.: RP 112 Concentrated 1ml  
RP 112-05 Concentrated 0.5ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon stained with Cytokeratin 8 antibody (RP 112).

Immunogen: Recombinant protein encoding human cytokeratin 8 (1-483 aa).

Positive Control: Skin, colon, lung

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 52.5 kDa protein. Cytokeratin 8 belongs to type B (basic) subfamily of high molecular weight cytokeratins and exist in combination with cytokeratin 18. Cytokeratin 8 is primarily found in the non-squamous epithelia and is present in a majority of adenocarcinomas and ductal carcinomas. It is absent in squamous cell carcinomas.

DBS is dedicated to high quality antibody production and development of novel multiplex staining reagents.



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Monoclonal Mouse Anti-Human

**Cytokeratin 8, Low Molecular Weight** F, P/E

Clone: 35βH11

Catalog No.: Mob 054 Concentrated 1ml  
Mob 054-05 Concentrated 0.5ml  
PDM 117 Prediluted 6ml  
PDM117-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon stained with Cytokeratin 8 antibody (Mob 054).

Immunogen: BALB/C mice were immunized with cytoskeletal extract of human hepatocellular carcinoma cell line, Hep3B.

Isotype: IgM, kappa

Positive Control: Skin, Colon

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes keratin polypeptide of 54 kDa. It stains strongly with non-squamous epithelium but does not stain squamous epithelium. It reacts with the sweat gland and ducts in the skin. Adenocarcinomas of the ovary, gastrointestinal tract, ductal carcinoma of breast, pancreas and bile ducts, stain positive with this antibody.

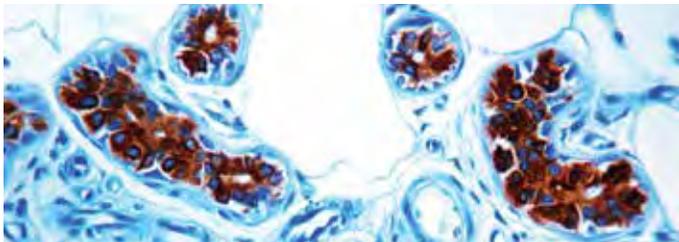
Monoclonal Mouse Anti-Human

**Cytokeratin 8/18** F, P/E

Clone: 5D3

Catalog No.: Mob 189 Concentrated 1ml  
Mob 189-05 Concentrated 0.5ml  
PDM 070 Prediluted 6ml  
PDM070-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with Cytokeratin 8/18 antibody (PDM 070).

Immunogen: Cytokeratins from the human breast carcinoma cell line MCF-7.

Isotype: IgG1

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to human cytokeratins 8 (52.5 kDa) and 18 (45 kDa). This antibody stains simple and glandular epithelium. This antibody can be useful for the identification of adenocarcinomas and most squamous cell carcinomas.

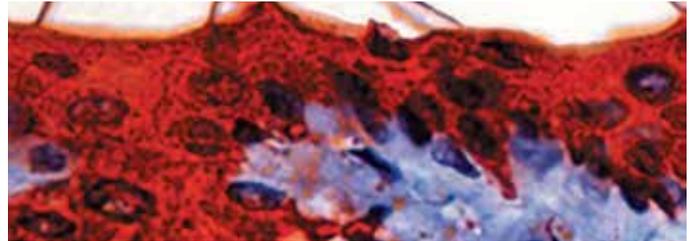
Monoclonal Mouse Anti-Human

**Cytokeratin 10** F, P

Clone: DE-K10

Catalog No.: Mob 055 Concentrated 1ml  
Mob 055-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with Cytokeratin 10 antibody (Mob 055).

Immunogen: BALB/C mice were immunized with detergent insoluble extract of human epidermis.

Isotype: IgG1, kappa

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes keratin polypeptide of 56.5 kDa. It stains suprabasal cells in the epidermis, thymic Hassall's bodies. Simple and glandular epithelia, transitional epithelium and adenocarcinomas are negative with this antibody.

Monoclonal Mouse Anti-Human

**Cytokeratin 10** F, P/E

Clone: LHP1

Catalog No.: Mob 185 Concentrated 1ml  
Mob 185-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Crude cytoskeletal extract prepared from the epidermal component of trypsin-split normal adult skin.

Isotype: IgG1, kappa

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to human cytokeratin 10. It recognizes a 56.5 kDa cytokeratin protein found in suprabasal layers of keratinizing stratified epithelia, suprabasal layers of non-keratinizing stratified epithelia and in differentiated areas of squamous carcinomas. This antibody is useful in the differentiation of stratified squamous epithelia.

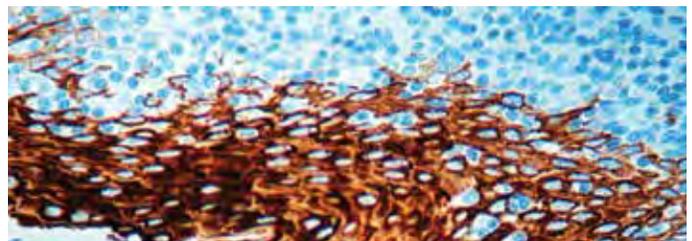
Monoclonal Mouse Anti-Human

**Cytokeratin 10/13** F, P

Clone: DE-K13

Catalog No.: Mob 056 Concentrated 1ml  
Mob 056-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin 10/13 antibody (Mob 056).

Immunogen: BALB/C mice were immunized with detergent insoluble extract of human epidermis.

Isotype: IgG2a, kappa

Positive Control: Skin, Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes keratin polypeptides of 53 and 56.5 kDa. It stains suprabasal cells in the epidermis, thymic Hassall's bodies, urothelium and non-cornifying stratified epithelia of vagina, ectocervix, tongue and esophagus. This antibody does not stain intraepithelial neoplasm and invasive squamous cell carcinoma.

Monoclonal Mouse Anti-Human

### Cytokeratin 13

F, P/H

Clone: K5-1A3

Catalog No.: Mob 443 Concentrated 1ml

Mob 443-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Cultured A431 cells from a human epidermoid carcinoma of the vulva.

Isotype: IgG1

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 54 kDa protein. Cytokeratin 13 belongs to the type A (acidic) subfamily of low molecular weight cytokeratins and exists in combination with cytokeratin 4. Cytokeratin 13 is expressed in squamous, non-keratinized epithelium, transitional epithelium and myoepithelium. This antibody is useful for the identification of carcinomas of trachea, sweat glands, bladder, ectocervix, tongue, esophagus, anal canal and the basal layer of keratinized epidermis.

Monoclonal Mouse Anti-Human

### Cytokeratin 14

F, P/H

Clone: LL002

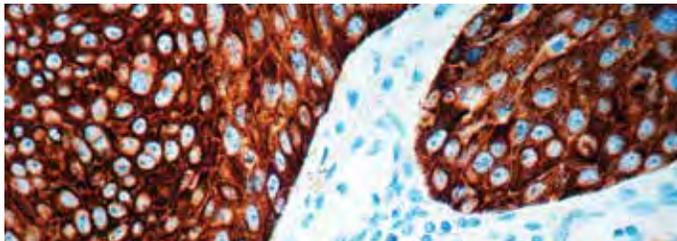
Catalog No.: Mob 186 Concentrated 1ml

Mob 186-05 Concentrated 0.5ml

PDM 138 Prediluted 6ml

PDM138-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded lung squamous cell carcinoma stained with Cytokeratin 14 antibody (Mob 186).

Immunogen: A synthetic peptide of 15 aa residues from the C-terminus of human keratin 14.

Isotype: IgG3

Positive Control: Skin, Squamous Cell Carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 50 kDa cytokeratin protein designated cytokeratin 14. Cytokeratin 14 belongs to the type A (acidic) subfamily of low molecular weight cytokeratins and exists in combination with cytokeratin 15. This antibody can be used to distinguish stratified epithelial cells from simple epithelial cells.

Polyclonal Rabbit Anti-Human

### Cytokeratin 14

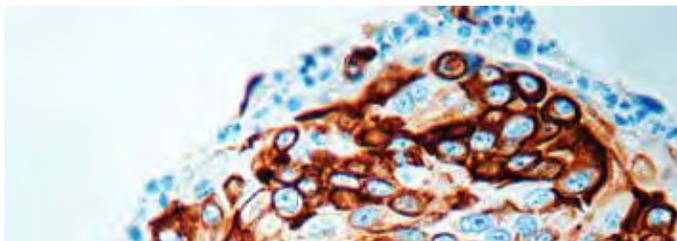
F, P/E

Catalog No.: RP 113 Concentrated 1ml

RP 113-05 Concentrated 0.5ml

PDR 052 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded lung squamous cell carcinoma stained with Cytokeratin 14 antibody (RP 113).

Immunogen: Recombinant protein derived from C-terminal end of human cytokeratin 14.

Positive Control: Skin, Squamous Cell Carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 50 kDa protein. Cytokeratin 14 belongs to type A (acidic) subfamily of low molecular weight cytokeratins and exist in combination with cytokeratin 5. Cytokeratin 14 may be useful in the study of breast cancer as a prognostic marker.

Monoclonal Mouse Anti-Human

### Cytokeratin 15

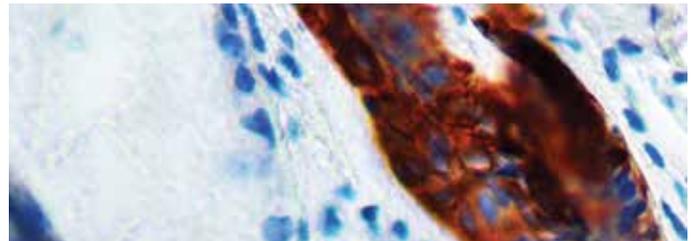
F, P/H

Clone: LKH15

Catalog No.: Mob 305 Concentrated 1ml

Mob 305-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with Cytokeratin 15 antibody (Mob 305).

Immunogen: A 17-mer synthetic peptide from the C-terminus of human cytokeratin 15.

Isotype: IgG2a, kappa

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: Cytokeratin 15 is a type I cytokeratin without a defined type II partner. Cytokeratin 15 is expressed primarily in the basal keratinocytes of stratified tissues, including the fetal epidermis and fetal nail.

Monoclonal Mouse Anti-Human

### Cytokeratin 16

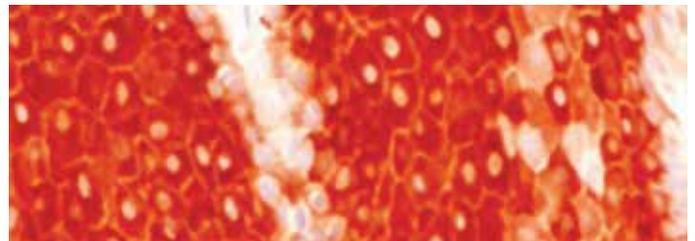
F, P/H

Clone: LL025

Catalog No.: Mob 273 Concentrated 1ml

Mob 273-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human squamous carcinoma of lung stained with Cytokeratin 16 antibody (Mob 273).

Immunogen: BALB/C mice were injected with a synthetic peptide from the C-terminus of human cytokeratin 16.

Isotype: IgG1

Positive Control: Skin, Squamous Cell Carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to a 48 kDa protein, which is identified as cytokeratin 16. Cytokeratin 16 is expressed in keratinocytes, which are undergoing rapid turnover in the suprabasal region. High concordance was found between the carcinomas immunostaining with the basal cell and the hyperproliferation-related keratins.

Monoclonal Mouse Anti-Human

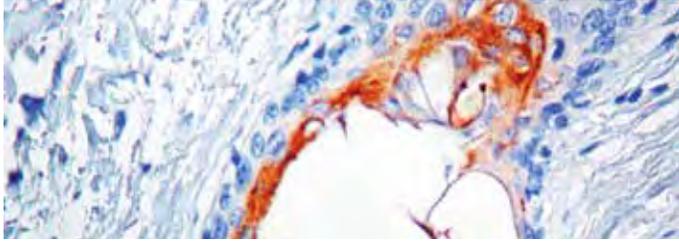
### Cytokeratin 17

F, P/H

Clone: E3

Catalog No.: Mob 127 Concentrated 1ml  
Mob 127-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with Cytokeratin 17 antibody (Mob 127).

Immunogen: Cytoskeletal fraction of rat colon epithelium.

Isotype: IgG2b, kappa

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 46 kDa cyto keratin protein designated cyto keratin 17. It reacts with basal cells in complex epithelia and reacts strongly with squamous cell carcinomas.

Monoclonal Mouse Anti-Human

### Cytokeratin 18

Catalog No.: Mob 053-01 Concentrated 1ml  
Mob 053-01-05 Concentrated 0.5ml  
PDM 068 Prediluted 6ml

Regulatory Status: IVD

Immunogen: Human epidermal carcinoma and MCF-7 human breast cancer cells.

Clone: CY-90

Isotype: IgG1, kappa

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes keratin polypeptide of 45 kDa. In normal tissues, it reacts with a large number of epithelial cell types, including ductal and glandular epithelia. This antibody does not react with squamous epithelia. Most of the adenocarcinomas, basal cell carcinomas and benign and malignant epithelial lesions stain with this antibody.

Monoclonal Mouse Anti-Human

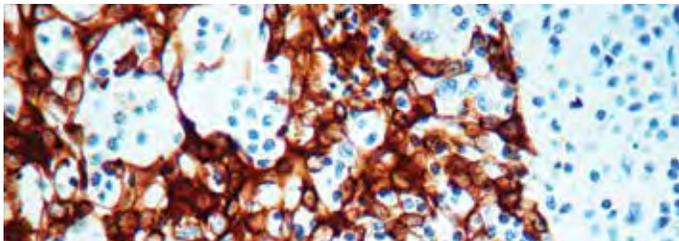
### Cytokeratin 18

F, P/H

Clone: DC10

Catalog No.: Mob 187 Concentrated 1ml  
Mob 187-05 Concentrated 0.5ml  
PDM 164 Prediluted 6ml  
PDM164-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin 18 antibody (Mob 187).

Immunogen: BALB/C mice were injected with PMC-42 human breast carcinoma cell line.

Isotype: IgG1

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to human cyto keratin 18 of 45 kDa. Cyto keratin 18 belongs to a family of acidic type A keratins and exists along with cyto keratin 8 in most simple ductal and glandular epithelia. This antibody does not react with squamous epithelium. It reacts with benign and malignant epithelial lesions as well as a majority of adenocarcinomas and basal cell carcinomas.

Monoclonal Mouse Anti-Human

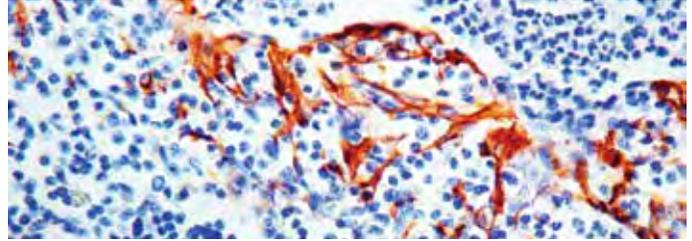
### Cytokeratin 19

F, P/H

Clone: BA17

Catalog No.: Mob 058 Concentrated 1ml  
Mob 058-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin 19 antibody (Mob 058).

Immunogen: BALB/C mice were immunized with detergent insoluble extract of human mammary epithelium.

Isotype: IgG1, kappa

Positive Control: Skin, Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes keratin polypeptide of 40 kDa. It is the smallest human keratin found in most simple and non-keratinizing stratified epithelia. This antigen is not present in adult intrafollicular epidermis. The antibody stains most of the epithelial cell types including ductal and glandular epithelia.

Monoclonal Mouse Anti-Human

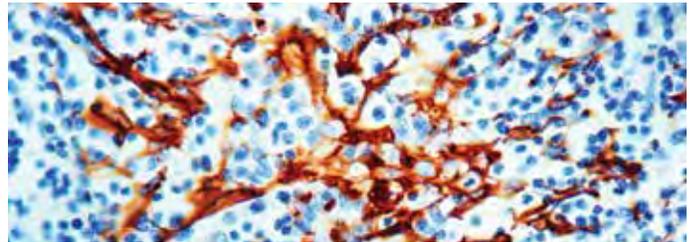
### Cytokeratin 19

F, P/H

Clone: A53-B/A2.26

Catalog No.: Mob 274 Concentrated 1ml  
Mob 274-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin 19 antibody (Mob 274).

Immunogen: BALB/C mice were injected with human breast cancer MCF-7 cells.

Isotype: IgG2a, kappa

Positive Control: Skin, Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to a 40 kDa protein, cyto keratin 19. Its epitope maps between amino acids 312-335. This antibody reacts with MCF-7 cells, which are known to contain cyto keratin 19.

Polyclonal Rabbit Anti-Human

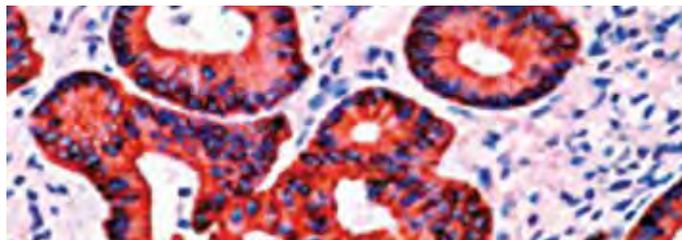
### Cytokeratin 19

F, P/E

Catalog No.: RP 114 Concentrated 1ml

RP 114-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon carcinoma stained with Cytokeratin 19 antibody (RP 114).

Immunogen: Synthetic protein derived from C-terminal end of human cytokeratin 19.

Positive Control: Skin, Colon Carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 40 kDa protein. Cytokeratin 19 belongs to type A (acidic) subfamily of low molecular weight cytokeratins. It is expressed in various different human tissues except in liver. Cytokeratin 19 is not expressed in hepatocytes, therefore cytokeratin 19 is useful in the identification of liver metastasis.

Monoclonal Rabbit Anti-Human

### Cytokeratin 20

F, P/H

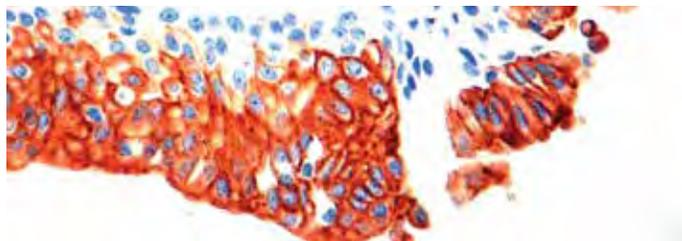
Clone: BV12

Catalog No.: RMAB 033 Concentrated 0.5ml

RMPD 033 Concentrated 6ml

RMPD033-10RM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon carcinoma stained with CK 20 antibody (RMPD 033).

Immunogen: A synthetic peptide from the C-terminus of human cytokeratin 20 protein.

Isotype: IgG

Positive Control: Colon carcinoma

Cellular Localization: Cytoplasmic

Specificity: Cytokeratin 20 is a Type-I keratin, which is expressed primarily in gastric and intestinal epithelium, urothelium, and Merkel cells. Cytokeratin 20 is expressed in adenocarcinomas of the colon, stomach, pancreas and the bile system. Cytokeratin 20 is also present in mucinous ovarian tumors, transitional-cell and Merkel cell carcinomas. Notably, the squamous cell carcinomas and adenocarcinomas of the breast, lung, and endometrium, non-mucinous tumors of the ovary, and small cell carcinomas lack in Cytokeratin 20.

Monoclonal Mouse Anti-Human

### Cytokeratin 20

F, P/E

Clone: K<sub>s</sub> 20.8

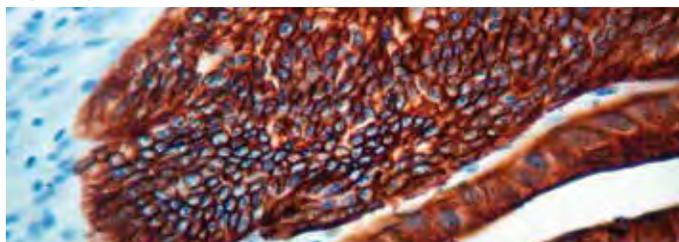
Catalog No.: Mob 123 Concentrated 1ml

Mob 123-05 Concentrated 0.5ml

PDM 049 Prediluted 6ml

PDM049-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon carcinoma stained with Cytokeratin 20 antibody (PDM 049).

Immunogen: Cytokeratins isolated from human micro-dissected villi of human duodenal mucosa.

Isotype: IgG2a, kappa

Positive Control: Skin, Colon Carcinoma

Cellular Localization: Cytoplasmic

Specificity: Cytokeratin 20 is less acidic than the other type I cytokeratins and is of particular interest because of its restricted range of expression. This antibody reacts with cytokeratin polypeptide of 46 kDa in immunoblot analyses. Studies have shown that a marked difference exists in the expression of Cytokeratin 20 among various carcinomas.

Monoclonal Mouse Anti-Human

### Cytokeratin, High Molecular Weight

F, P/E

Clone: 34βE12

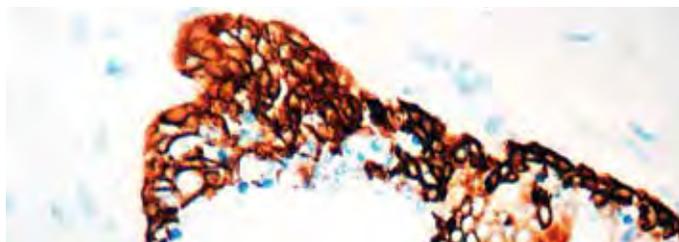
Catalog No.: Mob 059 Concentrated 1ml

Mob 059-05 Concentrated 0.5ml

PDM 074 Prediluted 6ml

PDM074-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human prostate stained with Cytokeratin HMW antibody (PDM 074).

Immunogen: BALB/C mice were immunized with solubilized keratin extract from human stratum corneum.

Isotype: IgG1, kappa

Positive Control: Skin, Prostate

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes keratin polypeptides of 68, 58, 56.5 and 50 kDa in the stratum corneum. The antibody reacts with squamous, ductal and other complex epithelia. It stains adenocarcinomas, breast, pancreas, bile duct, salivary gland and transitional cell carcinomas.

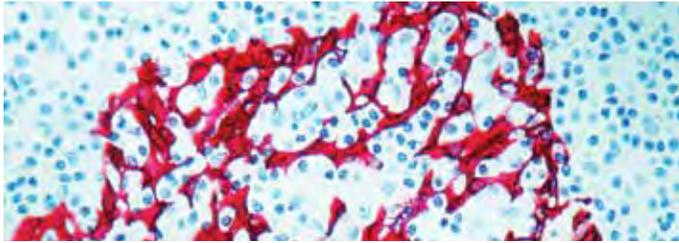
Monoclonal Mouse Anti-Human  
**Cytokeratin, High Molecular Weight**

F, P/E

Clone: DE-SQ

Catalog No.: Mob 275 Concentrated 1ml  
Mob 275-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Cytokeratin H.M.W. antibody (Mob 275).

Immunogen: BALB/C mice were injected with cytoskeletal fraction prepared from human gingiva by detergent/salt extraction.

Isotype: IgG1

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to cytokeratin 13, 14, 15 and 16. This antibody stains squamous carcinomas and adenocarcinomas but does not stain adenocarcinoma. This antibody is useful in differential staining of squamous carcinomas from adenocarcinomas and to differentiate benign and malignant tumors of prostate glands.

Monoclonal Mouse Anti-Human

**Cytokeratin, Pan**

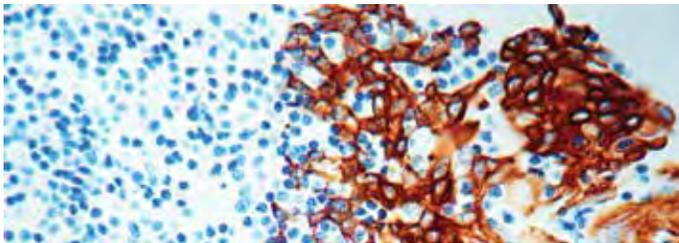
F, P/H/E

Clone: 5D3 + LP34

Catalog No.: Mob 108 Concentrated 1ml  
Mob 108-05 Concentrated 0.5ml  
PDM 071 Prediluted 6ml  
PDM071-10MM Prediluted 10ml

3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with Pan Cytokeratin antibody (Mob 108).

Immunogen: Cytokeratins from human breast carcinoma cell line MCF-7 and detergent insoluble fraction of psoriatic epidermis.

Isotype: 5D3, IgG2a; LP34, IgG1

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody is a cocktail of two different clones: 5D3 and LP34. This antibody stains cytokeratin 5, 6, 8 and 18. This antibody has been designed for broad spectrum screening of cytokeratins. It stains carcinomas of simple and squamous origin.

Monoclonal Mouse Anti-Human

**Cytokeratin, Pan**

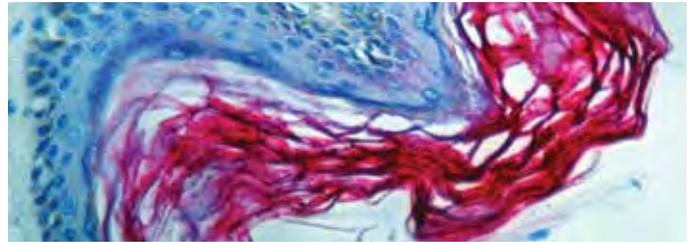
F, P/H

Clone: KL1

Catalog No.: Mob 191 Concentrated 1ml  
Mob 191-05 Concentrated 0.5ml  
PDM 073 Prediluted 6ml  
PDM073-10MM Prediluted 10ml

3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with Pan Cytokeratin antibody (PDM 073).

Immunogen: Human keratin isolated from epidermal stratum corneum.

Isotype: IgG1, kappa

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: Immunoblotting analysis revealed that this antibody reacts with cytokeratin 1, 2, 5, 6, 7, 8, 11, 14, 16, 17 and 18. This antibody stains with neoplastic cells of epithelial origin. Non-epithelial cells and skin basal layer cells do not stain with this antibody.

Monoclonal Mouse Anti-Human

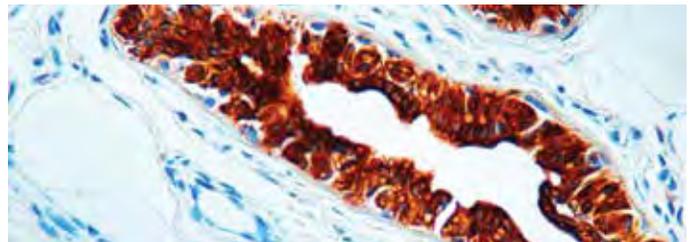
**Cytokeratin, Pan**

F, P/E

Clone: Lu-5

Catalog No.: Mob 356 Concentrated 1ml  
Mob 356-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with Pan Cytokeratin antibody (Mob 356).

Immunogen: BALB/C mice were injected with lung cancer cell line.

Isotype: IgG1

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with cytokeratins of acidic as well as basic subfamilies, i.e. 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17, 18 and 19. It reacts with keratinized and corneal epidermis, stratified epithelia, hyperproliferative keratinocytes and simple epithelia. This antibody is a broad spectrum anti-pan cytokeratin antibody, which differentiates epithelial from non-epithelial tumors.

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Monoclonal Mouse Anti-Human

### Cytokeratin, Pan

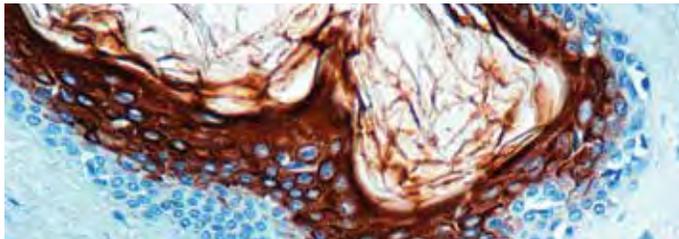
F, P/H

Clone: C-11

Catalog No.: Mob 444 Concentrated 1ml

Mob 444-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with Pan Cytokeratin antibody (Mob 444).

Immunogen: Keratin enriched preparation from cultured human epidermoid carcinoma cell line A431.

Isotype: IgG1

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: Monoclonal anti-pan cytokeratin (clone C-11) recognizes human cytokeratins 4, 5, 6, 8, 10, 13 and 18 in immunoblotting. It is a broad-spectrum antibody, which reacts specifically with a wide variety of normal, reactive and neoplastic epithelial tissues. The antibody reacts with simple, cornifying and non-cornifying squamous epithelia and pseudostratified epithelia. It does not react with non-epithelial normal human tissues.

Polyclonal Rabbit Anti-Human

### Cytokeratin, Wide Spectrum

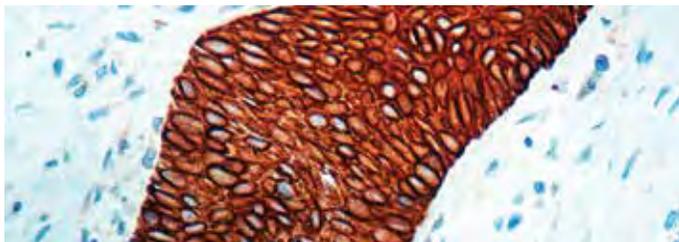
F, P/E

Catalog No.: RP 010 Concentrated 1ml

RP 010-05 Concentrated 0.5ml

PDR 035 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with Cytokeratin Wide Spectrum antibody (PDR 035).

Immunogen: Cytokeratin isolated from bovine muzzle epidermis.

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with cytokeratins of 58, 56, 52, 60, 51, 48 and 68 kDa MW. This antibody is well suited for the staining of a broad spectrum of human keratins.

Monoclonal Mouse Anti-Human

### Cytomegalovirus (CMV Cocktail)

F, P/E

Clone: DDG9 + CCH2

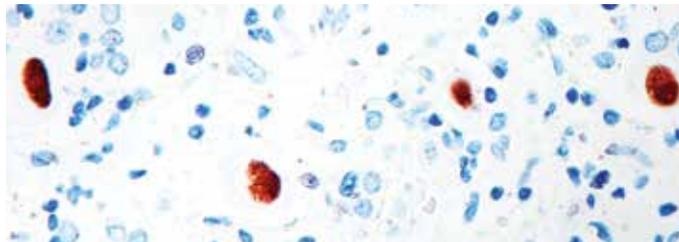
Catalog No.: Mob 049 Concentrated 1ml

Mob 049-05 Concentrated 0.5ml

PDM 075 Prediluted 6ml

PDM075-10MM Prediluted 10ml 360

Regulatory Status: ASR



Formalin fixed paraffin embedded tissue stained with CMV antibody (Mob 049).

Immunogen: BALB/C mice were immunized with cytomegalovirus infected cell lysate.

Isotype: DDG9, IgG2a, kappa; CCH2, IgG1, kappa

Positive Control: Infected lung

Cellular Localization: Nuclear

Specificity: This cocktail antibody stains infected cells giving a nuclear staining pattern with an immediate early and an early CMV antigen.

Monoclonal Mouse Anti-Human

### Desmin

F, P/H

Clone: D33

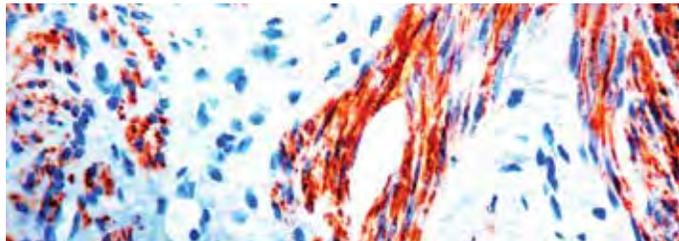
Catalog No.: Mob 060 Concentrated 1ml

Mob 060-05 Concentrated 0.5ml

PDM 006 Prediluted 6ml

PDM006-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human leiomyoma stained with Desmin antibody (PDM 006).

Immunogen: BALB/C mice were immunized with purified desmin from human muscle.

Isotype: IgG1, kappa

Positive Control: Leiomyoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with desmin protein of 53 kDa. Both striated as well as smooth muscle cells stain well with this antibody. The antibody shows a broad interspecific cross-reactivity, reacting with human.

Polyclonal Rabbit Anti-Human

### Desmin

F, P/H

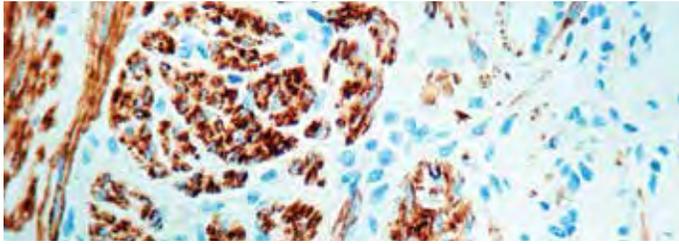
Catalog No.: RP 011 Concentrated 1ml

RP 011-05 Concentrated 0.5ml

PDR 026 Prediluted 6ml

PDR026-10RP Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human uterus stained with Desmin antibody (PDR 026).

Immunogen: Desmin isolated from chicken gizzard.

Positive Control: Leiomyoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with both smooth and striated muscle cells. This antibody can be used for typing of soft tissue sarcomas.

Monoclonal Mouse Anti-Human

### DNA Polymerase, $\beta$

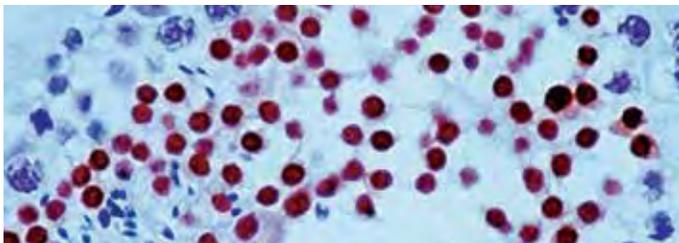
F, P/H

Clone: 61

Catalog No.: Mob 319 Concentrated 1ml

Mob 319-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human testis stained with DNA polymerase  $\beta$  antibody (Mob 319).

Immunogen: BALB/C mice were injected with DNA polymerase  $\beta$  protein.

Isotype: IgG2a

Positive Control: Testis

Cellular Localization: Nuclear

Specificity: This antibody is specific to 39 kDa protein known as DNA polymerase  $\beta$ . DNA polymerase  $\beta$  comprises an amino-terminal 8 kDa domain and a carboxy-terminal 31 kDa domain. DNA Polymerase  $\beta$ , a DNA repair polymerase, is constitutively expressed in cultured cells. DNA polymerase  $\beta$  fills single nucleotide gaps in DNA produced by the base excision repair pathway of mammalian cells.

Monoclonal Mouse Anti-Human

### DOG 1

P/H

Clone: DOG1.1

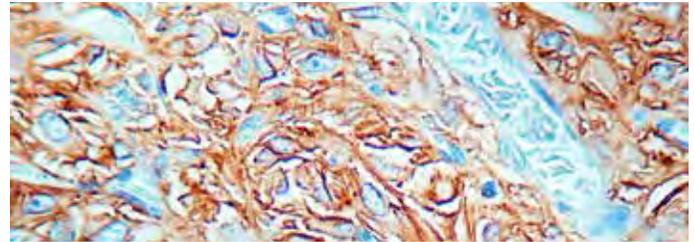
Catalog No.: Mob 466 Concentrated 1ml

Mob 466-05 Concentrated 0.5ml

PDM 170 Prediluted 6ml

PDM170-10MM Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded gastrointestinal stromal tumor stained with DOG1 antibody (Mob 466).

Immunogen: A synthetic peptide of human DOG1 protein.

Isotype: IgG

Positive Control: Gastrointestinal stromal tumor tissue

Cellular Localization: Cytoplasmic and membrane

Specificity: DOG1 is expressed ubiquitously in gastrointestinal stromal tumors irrespective of c-kit or PDGFR alpha mutation status. Reactivity for DOG1 may aid in the diagnosis of gastrointestinal stromal tumors, including PDGFRA mutants that fail to express c-kit antigen, and lead to appropriate treatment with imatinib mesylate, an inhibitor of the c-kit tyrosine kinase.

Polyclonal Rabbit Anti-Human

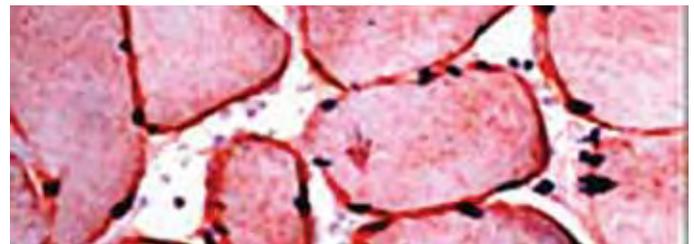
### Dysferlin

F, P/H

Catalog No.: RP 151 Concentrated 1ml

RP 151-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human skeletal muscle stained with Dysferlin antibody (RP 151).

Immunogen: A synthetic peptide corresponding to C-terminal of human dysferlin.

Positive Control: Skeletal muscle

Cellular Localization: Cytoplasmic, cell membrane

Specificity: Dysferlin is the protein product of the 2p13 gene that is defective in patients with Limb-Girdle Muscular Dystrophy type 2B (LGMD2B) and Miyoshi Myopathy (MM). Dysferlin is normally localized to the muscle plasma membrane. In patients with LGMD2B and MM, immunoreactivity to dysferlin is severely reduced or lost, depending on the type of mutation. This antibody is used for the characterization of LGMD2B and MM.



## Did you know?

Dandelion seeds are often transported away by a gust of wind and they travel like tiny parachutes. On a breezy day, a really strong wind can transport these tiny parachutes miles away from the parent dandelion plant.

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Monoclonal Mouse Antibody

### Dystrophin

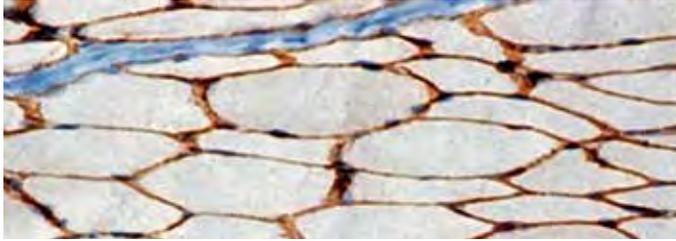
Clone: 1808

Catalog No.: Mob 387 Concentrated 1ml

Mob 387-05 Concentrated 0.5ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human skeletal muscle stained with Dystrophin antibody (Mob 387).

Immunogen: BALB/C mice were immunized with acetylcholine receptor enriched membranes and peripheral membrane proteins from *Torpedo nobiliana* electric organ.

Isotype: IgG1

Positive Control: Skeletal muscle

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a protein of 427 kDa. This antibody is highly specific to dystrophin and shows no cross-reaction with C-protein,  $\alpha$ -actin and human muscle spectrin. Dystrophin is a member of spectrin/ $\alpha$  actinin family of actin-binding protein.

Polyclonal Rabbit Anti-Human

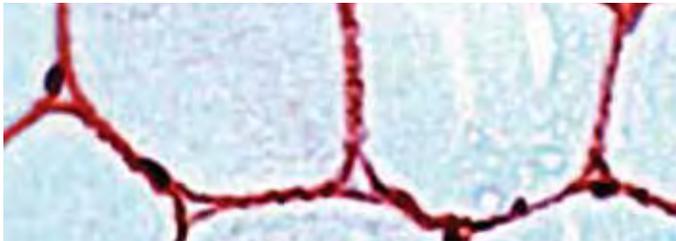
### Dystrophin

Catalog No.: RP 152 Concentrated 1ml

RP 152-05 Concentrated 0.5ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human skeletal muscle stained with Dystrophin antibody (RP 152).

Immunogen: A synthetic peptide corresponding to C-terminal of human dystrophin.

Positive Control: Skeletal muscle

Cellular Localization: Cell membrane

Specificity: Dystrophin is the 427 kDa protein product of the DMB/BMD gene located on the X chromosome at position Xp21. Western blotting and immunohistochemistry are the two established methods for the detection of abnormalities of dystrophin expression in muscle biopsies. Dystrophin abnormalities are thought to occur in 100 per cent of patients with DMD/BMD, although genetic abnormalities may only be detected in up to 65 per cent of cases.

Monoclonal Mouse Anti-Human

### E2F-1 Transcription Factor

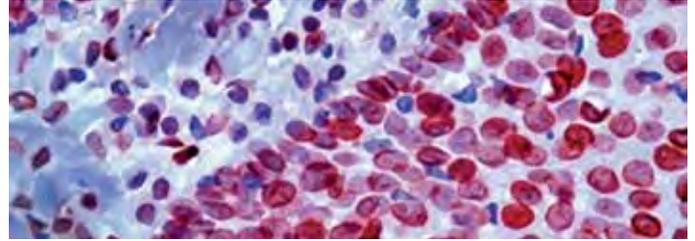
Clone: KH95

Catalog No.: Mob 381 Concentrated 1ml

Mob 381-05 Concentrated 0.5ml

F, P/H

Regulatory Status: RUO



Formalin fixed paraffin embedded human tonsil, breast carcinoma stained with E2F-1 Transcription Factor antibody (Mob 381).

Immunogen: BALB/C mice were immunized with a recombinant human E2F-1 protein.

Isotype: IgG2a

Positive Control: Tonsil, breast carcinoma

Cellular Localization: Nuclear

Specificity: This antibody reacts with a protein of 60 kDa. E2Fs are DNA-binding proteins, which associate with negative regulators, such as the retinoblastoma p107 protein, resulting in an altered rate of gene transcription. E2F-1 is proposed to be involved in several cellular processes that range from tumor suppression, cell progression and oncogenesis. E2F-1 over expression can also drive cells into apoptosis.

Monoclonal Mouse Anti-Human

### E2F-4 Transcription Factor

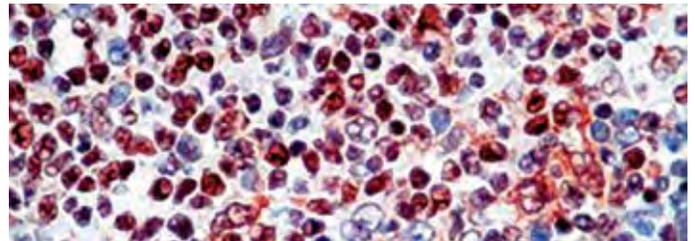
Clone: 4E2F04

Catalog No.: Mob 382 Concentrated 1ml

Mob 382-05 Concentrated 0.5ml

F, P/H

Regulatory Status: RUO



Formalin fixed paraffin embedded human tonsil stained with E2F-4 Transcription Factor antibody (Mob 382).

Immunogen: BALB/C mice were immunized with a recombinant human E2F-4 protein.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Nuclear, cytoplasmic

Specificity: This antibody reacts with a protein of 56 kDa. E2Fs are DNA-binding proteins, which associate with negative regulators, such as the retinoblastoma p107 protein, resulting in an altered rate of gene transcription. E2F-4 is regulated by complex formation with Rb p110. E2F family members bind DNA as heterodimers with members of the DP family of polypeptides.

Monoclonal Mouse Anti-Human

### E-Cadherin

Clone: SPM471

Catalog No.: Mob 193-1 Concentrated 1ml

Mob 193-1-05 Concentrated 0.5ml

PDM 182 Prediluted 6ml

PDM182-10MM Prediluted 10ml 360

F, P/H

Regulatory Status: IVD

Immunogen: Recombinant protein encoding human Cadherin-E 600-707aa

Isotype: IgG 2b/k

Positive Control: Breast carcinoma, Colon carcinoma, Appendix

Cellular Localization: Cell Membrane

Specificity: E-cadherin (uvomorulin, cell-CAM120/80) is a calcium dependent cell adhesion molecule expressed predominately in epithelial tissues. It plays an important role in the growth and development of cells via the mechanisms of control of tissue architecture and the maintenance of tissue integrity. Numerous studies have demonstrated that reduction and/or loss of E-cadherin expression in carcinomas correlates positively with the potential of these tumors for invasion and metastasis.

Monoclonal Mouse Anti-Human

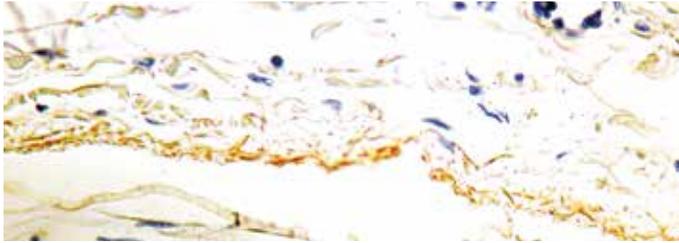
### Elastin

F, P/E

Clone: BA-4

Catalog No.: Mob 230 Concentrated 1ml  
Mob 230-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human kidney stained with Elastin antibody (Mob 230).

Immunogen: Bovine  $\alpha$ -elastin.

Isotype: IgG1

Positive Control: Heart, Kidney

Cellular Localization: Connective tissue

Specificity: This antibody recognizes insoluble elastin,  $\alpha$ -elastin, soluble non-cross linked precursor of elastin (tropoelastin). Elastin is an important polymeric protein of connective tissue that imparts elasticity to vertebrate elastic tissues.

Monoclonal Mouse Anti-Human

### Endothelin-1

F, P/H

Clone: TR.ET.48.5

Catalog No.: Mob 447 Concentrated 1ml  
Mob 447-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Purified endothelin-1 of human origin.

Isotype: IgG1

Positive Control: Placenta, Lung

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts specifically with human ET-1. The antibody shows 90% cross-reactivity with vasointestinal constrictor, <10% cross-reactivity with ET-2 and ET-3, and no cross-reactivity with sarafotoxin 6c, the C-terminal hexapeptide of ET-1. The endothelins show potent constrictor activity in vascular and non-vascular smooth muscle. This family of 21-amino acid peptides exists in at least three isoforms - ET-1, ET-2, and ET-3, and is produced in endothelial and epithelial cells.

Monoclonal Mouse Anti-Human

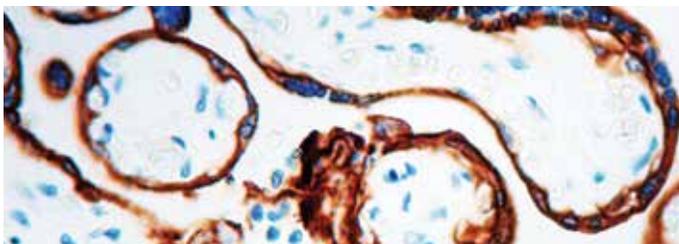
### Epidermal Growth Factor Receptor (EGFR)

F, P

Clone: 111.6

Catalog No.: Mob 267 Concentrated 1ml  
Mob 267-05 Concentrated 0.5ml  
PDM 132 Prediluted 6ml  
PDM132-10MM Prediluted 10ml 3 6 0

Regulatory Status: ASR



Formalin fixed paraffin embedded human placenta stained with EGFR antibody (Mob 267).

Immunogen: BALB/C mice were injected with extracellular domain of human recombinant EGFR protein.

Isotype: IgG1

Positive Control: Placenta

Cellular Localization: Cell membrane

Specificity: This antibody is specific to a 170 kDa protein. EGF-Receptor is a member of the type I family of growth factor receptors. The antibody recognizes an epitope mapping in the extracellular domain of EGFR. Overexpression of EGFR has been reported in tumors of breast, brain, bladder, lung, stomach, head and neck, esophagus, cervix, vulva, ovary and endometrium. EGFR is over expressed in squamous cell carcinoma.

Monoclonal Rabbit Anti-Human

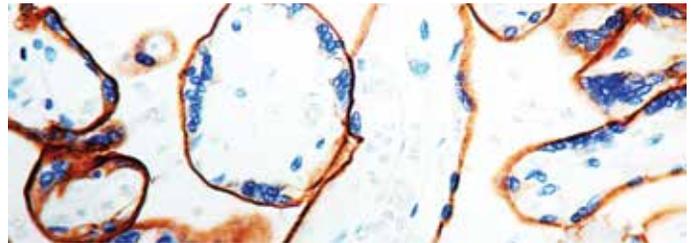
### Epidermal Growth Factor Receptor (EGFR)

F, P

Clone: SP9

Catalog No.: RMAB 020 Concentrated 0.5ml  
RMPD 020 Prediluted 6ml  
RMPD020-10RM Prediluted 10ml 3 6 0

Regulatory Status: ASR



Formalin fixed paraffin embedded human placenta stained with EGFR antibody (RMAB 020).

Immunogen: A synthetic peptide from C-terminus of human EGFR protein.

Isotype: IgG

Positive Control: Placenta, lung

Cellular Localization: Cytoplasmic, cell membrane

Specificity: This antibody recognizes EGFR. EGFR is a type I receptor tyrosine kinase with sequence homology to erbB-1, -2, -3, -4. It binds to epidermal growth factor (EGF), transforming growth factor- $\alpha$  (TGF- $\alpha$ ), heparin-binding EGF (HB-EGF), amphiregulin,  $\beta$ -cellulin and epiregulin. EGFR is overexpressed in tumors of breast, brain, bladder, lung, stomach, head, neck, esophagus, cervix, vulva, ovary, and endometrium. It is predominantly present in squamous cell carcinomas.

Monoclonal Mouse Anti-Human

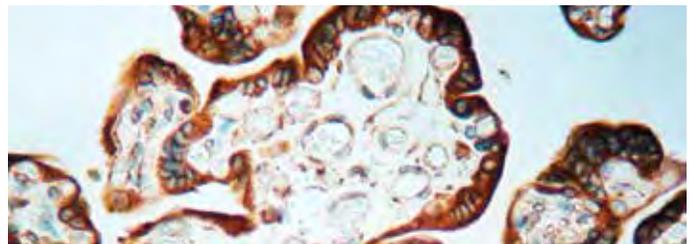
### Epidermal Growth Factor Receptor (EGFR)

F, P

Clone: 31G7

Catalog No.: Mob 461 Concentrated 1ml  
Mob 461-05 Concentrated 0.5ml

Regulatory Status: ASR



Formalin fixed paraffin embedded human placenta stained with EGFR antibody (Mob 461).

Immunogen: Human EGFR derived from A-431 cell line.

Isotype: IgG1

Positive Control: Breast carcinoma, Placenta

Cellular Localization: Membrane, cytoplasm

Specificity: The epidermal growth factor receptor (EGFR) is a 170 kDa transmembrane protein consisting of an extracellular EGF-binding domain, a short transmembrane region and an intracellular domain with ligand-activated tyrosine kinase activity. EGFR is expressed in many normal epithelial tissues, particularly in the basal layers of stratified epithelium and in squamous epithelium. Over expression of EGFR has been observed in many types of neoplasia, as a result of gene amplification and/or increased protein transcription.

Monoclonal Mouse Anti-Human

**Epithelial Antigen**

F, P/H

Clone: Ber-EP4

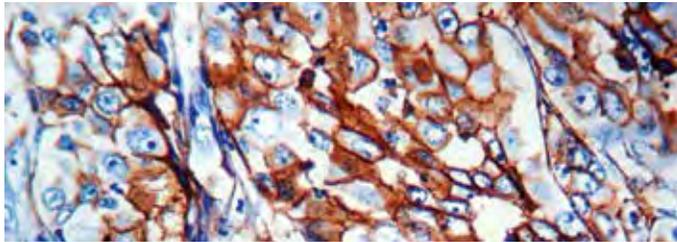
Catalog No.: Mob 406 Concentrated 1ml

Mob 406-05 Concentrated 0.5ml

PDM 131 Prediluted 6ml

PDM131-10MM Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast carcinoma stained with Epithelial Antigen (PDM 131).

Immunogen: BALB/C mice were immunized with human breast carcinoma cell line, MCF-7.

Isotype: IgG1, kappa

Positive Control: Kidney, Breast carcinoma

Cellular Localization: Cell membrane

Specificity: Epithelial antigen is a cell surface glycoprotein and is broadly distributed in epithelial cells and displays a highly conserved expression in carcinomas. Epithelial antigen has been shown to play an important role as a tumor cell marker in lymph nodes from patients with esophageal carcinoma. Epithelial antigen can be used to distinguish between basal cell and basosquamous carcinomas and squamous cell carcinoma of the skin.

Monoclonal Mouse Anti-Human

**Epithelial Antigen**

F, P/E

Clone: VU-1D9

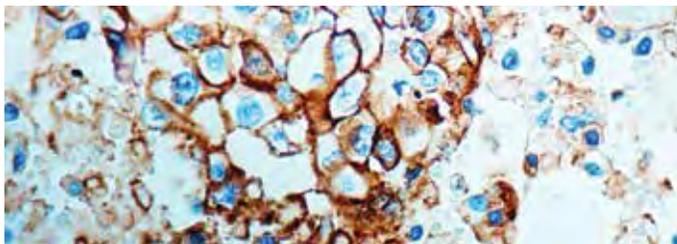
Catalog No.: Mob 062 Concentrated 1ml

Mob 062-05 Concentrated 0.5ml

PDM 077 Prediluted 6ml

PDM077-10MM Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast carcinoma stained with Epithelial Antigen (Mob 062).

Immunogen: BALB/C mice were immunized with small cell lung carcinoma.

Isotype: IgG1, kappa

Positive Control: Breast carcinoma

Cellular Localization: Cell membrane

Specificity: This antibody reacts with two glycoproteins of 34 and 49 kDa present on the epithelial cells. It stains with simple epithelia and basal layers of stratified non-keratinized squamous epithelium.

Monoclonal Mouse Anti-Human

**Epithelial Membrane Antigen (EMA)**

F, P

Clone: GP1.4

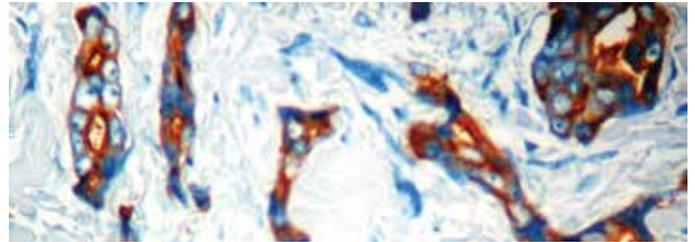
Catalog No.: Mob 063 Concentrated 1ml

Mob 063-05 Concentrated .05ml

PDM 007 Prediluted 6ml

PDM007-10MM Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast carcinoma stained with EMA antibody (PDM 007).

Immunogen: BALB/C mice were immunized with human milk fat globule membranes.

Isotype: IgG1, kappa

Positive Control: Breast carcinoma

Cellular Localization: Cell membrane and cytoplasmic

Specificity: This antibody reacts with an antigen of 265-400 kDa belonging to a heterogeneous group of heavily glycosylated proteins called human milk fat globule proteins. It stains both normal and neoplastic cells. Among normal epithelia, it reacts strongly with mammary epithelium and glandular epithelia but shows a patchy staining with squamous epithelium.

Monoclonal Mouse Anti-Human

**Epithelial Membrane Antigen (EMA)**

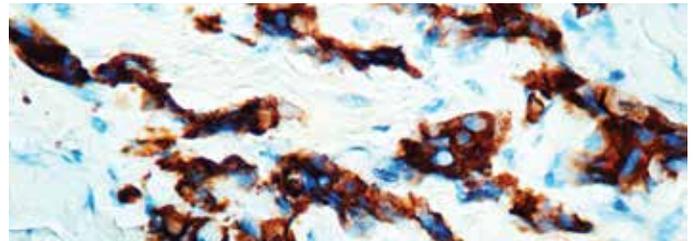
F, P/H/E

Clone: E29

Catalog No.: Mob 401 Concentrated 1ml

Mob 401-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast carcinoma stained with Epithelial Antigen (Mob 401).

Immunogen: BALB/C mice were immunized with delipidated human milk fat globule membrane preparation.

Isotype: IgG2a, kappa

Positive Control: Breast carcinoma

Cellular Localization: Cell membrane and cytoplasmic

Specificity: This antibody reacts with an antigen of 265-400 kDa belonging to a heterogeneous group of heavily glycosylated proteins called human milk fat globule proteins. It stains both normal and neoplastic cells. Among normal epithelia, it reacts strongly with mammary epithelium and glandular epithelia but shows a patchy staining with squamous epithelium.

Monoclonal Mouse Anti-Human

### Epstein-Barr Virus (EBV)

F, P/H

Clone: CS1, CS2, CS3, CS4

Catalog No.: Mob 194 Concentrated 1ml

Mob 194-05 Concentrated 0.5ml

PDM 128 Prediluted 6ml

Regulatory Status: ASR

Immunogen: Recombinant fusion protein containing sequences of bacterial  $\beta$ -galactosidase and EBV encoded latent membrane protein.

Isotype: IgG1

Positive Control: Infected lymphoblastoma

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 60 kDa latent membrane protein (LMP-1) encoded by the BNLF1 gene of the EBV. Each clone reacts with different epitopes on the hydrophilic C-terminus of the cytoplasmic domain of LMP-1. This antibody stains strongly with EBV positive lymphoblastoid cell lines and EBV infected B cell immunoblasts in infectious mononucleosis.

Monoclonal Mouse Anti-Human

### ERCC1

F, P/H

Clone: 8F1

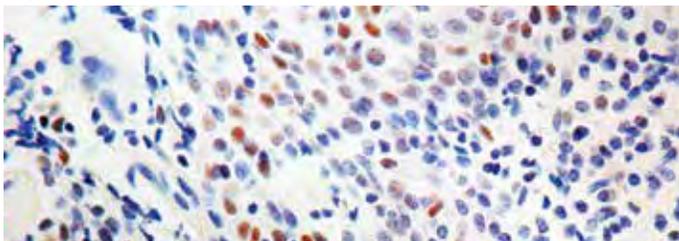
Catalog No.: Mob 336 Concentrated 1ml

Mob 336-05 Concentrated 0.5ml

PDM 151 Prediluted 6ml

PDM151-10MM Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with ERCC1 antibody (Mob 336).

Immunogen: BALB/C mice were injected with full length recombinant human ERCC1 protein.

Isotype: IgG2b

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: This antibody reacts with a 33-36 kDa protein known as ERCC1 (excision repair cross complementing) polypeptide. ERCC1 is required for nucleotide excision repair of damaged DNA and is homologous to RAD10. In mammalian cells, XPG cleaves 3' of the DNA lesion while ERCC1-XPF complex makes the 5' incision.

Monoclonal Rabbit Anti-Human

### ERG

NEW

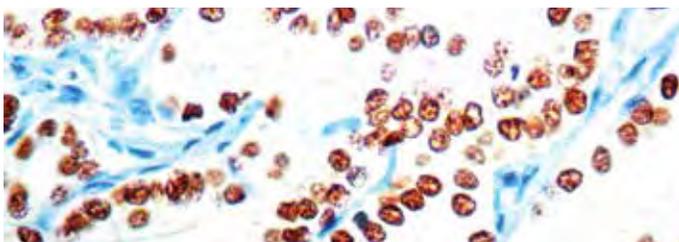
P/H

Clone: EP111

Catalog No.: RMPD 034 Prediluted 6ml

RMPD034-10RM Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human prostate carcinoma stained with ERG antibody (RMPD 034).

Immunogen: A synthetic peptide corresponding to residues on the C-terminus of the human ERG protein.

Isotype: IgG

Positive Control: Prostate carcinoma

Cellular Localization: Nuclear

Specificity: ERG, the ETS related gene, belongs to the ETS family that plays important roles in cell development, differentiation, proliferation, apoptosis and tissue remodeling. The ERG antibody identifies endothelial cells, lymphocytes and prostate cancer cells.

Monoclonal Mouse Anti-Human

### Estrogen Receptor

F, P/H

Clone: 1D5

Catalog No.: Mob 195 Concentrated 1ml

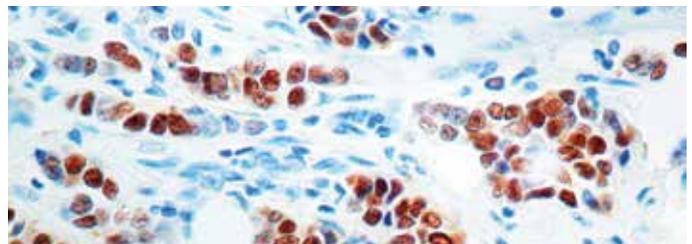
Mob 124 Concentrated 0.5ml

PDM 001 Prediluted 5ml

PDM 001-01 Prediluted 6ml

PDM001-10MM Prediluted 10ml 3 6 0

Regulatory Status: ASR



Formalin fixed paraffin embedded human breast carcinoma stained with Estrogen Receptor antibody (Mob 124).

Immunogen: Recombinant human estrogen receptor protein.

Isotype: IgG1, kappa

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to estrogen receptor, which is associated with superior prognosis and a better response to anti-estrogen therapy. The nuclei of the estrogen receptor positive cells stain very strongly with this antibody, without any staining in the cytoplasm. However, on cryostat sections a positive staining of estrogen receptor in the nucleus as well as cytoplasm can be seen.

Monoclonal Mouse Anti-Human

### Estrogen Receptor

F, P/H

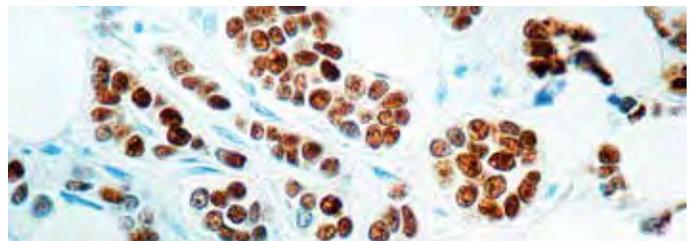
Clone: 6F11

Catalog No.: Mob 121 Concentrated 0.5ml

PDM 048 Prediluted 5ml

PDM048-10MM Prediluted 10ml 3 6 0

Regulatory Status: ASR



Formalin fixed paraffin embedded human breast carcinoma stained with Estrogen Receptor antibody (Mob 121).

Immunogen: Prokaryotic recombinant protein corresponding to the full-length estrogen receptor molecule.

Isotype: IgG1

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to estrogen receptor, which is associated with superior prognosis and a better response to anti-estrogen therapy. The nuclei of the estrogen receptor positive cells stain very strongly with this antibody, without any staining in the cytoplasm.

Monoclonal Rabbit Anti-Human

**Estrogen Receptor**

F, P/H

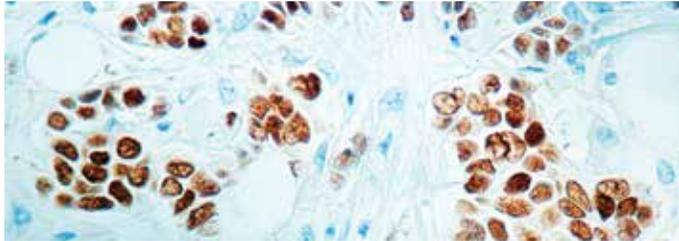
Clone: BV3

Catalog No.: RMAB 024 Concentrated 0.5ml

RMPD 024 Prediluted 6ml

RMPD024-10RM Prediluted 10ml **360**

Regulatory Status: ASR



Formalin fixed paraffin embedded human invasive breast carcinoma stained with Estrogen Receptor antibody (RMAB 024).

Immunogen: A synthetic cyclic peptide from the antigen C-terminus.

Isotype: IgG

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: Estrogen receptor (ER) is a nuclear receptor for estrogens such as estradiol (the main endogenous human estrogen). The two different estrogen receptor proteins produced from the ESR1 and ESR2 genes are usually called the  $\alpha$  and  $\beta$  receptors. This ER antibody recognizes a protein of 67kDa, which is identified as estrogen receptor (ER)  $\alpha$ . The ER gene consists of more than 140kb of genomic DNA divided into 8 exons, being translated into a protein with six functionally discrete domains, labeled A through F. This antibody strongly stains the nucleus of epithelial cells in breast carcinomas. ER is an important regulator of growth and differentiation of cells in the mammary gland.

Polyclonal Rabbit Anti-Human

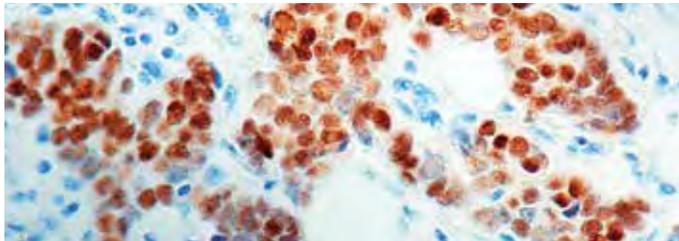
**Estrogen Receptor**

F, P/H

Catalog No.: RP 141 Concentrated 1ml

RP 141-05 Concentrated 0.5ml

Regulatory Status: ASR



Formalin fixed paraffin embedded human breast carcinoma stained with Estrogen Receptor antibody (RP 141).

Immunogen: A synthetic peptide derived from C-terminus of human estrogen receptor.

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: Recognizes a protein named estrogen receptor (ER)  $\alpha$ . The ER gene consists of more than 140kb of genomic DNA divided into 8 exons, being translated into a protein with six functionally discrete domains, labeled A through F. This antibody strongly stains the nucleus of epithelial cells in breast carcinomas. The ER is an important regulator of growth and differentiation in the mammary gland.

Monoclonal Rabbit Anti-Human

**Estrogen Receptor**

F, P/H

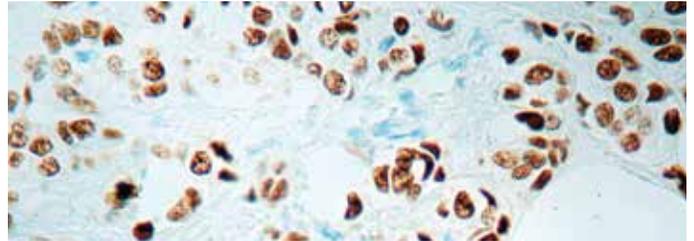
Clone: SP1

Catalog No.: RMAB 001 Concentrated 0.5ml

RMPD 001 Prediluted 6ml

RMPD001-10RM Prediluted 10ml **360**

Regulatory Status: ASR



Formalin fixed paraffin embedded human breast carcinoma stained with Estrogen Receptor antibody (RMPD 001).

Immunogen: Synthetic peptide derived from C-terminal of human estrogen receptor.

Isotype: IgG

Positive Control: Breast Carcinoma

Cellular Localization: Nuclear

Specificity: This antibody recognizes a protein of 67kDa, which is identified as estrogen receptor (ER). ER content of breast cancer tissue is an important parameter in the prediction of prognosis and response to endocrine therapy. This antibody strongly stains the nucleus of epithelial cells in breast carcinomas. The ER is an important regulator of growth and differentiation in the mammary gland. Presence of ER in breast tumors indicates an increased likelihood of response to anti-estrogen (e.g. tamoxifen) therapy.

Monoclonal Mouse Anti-Human

**Ets-1 Oncoprotein**

F, P/H

Clone: 1G11

Catalog No.: Mob 411 Concentrated 1ml

Mob 411-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Prokaryotic recombinant protein corresponding to amino acids 226 to 454 of the human Ets-1 oncoprotein.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: Ets-1 is a transcription factor known to regulate expression of a number of genes involved in extracellular matrix remodeling. Ets-1 is absent from normal gastric epithelium but is expressed in approximately 60% of gastric carcinomas and oral squamous cell carcinomas with a significant correlation to the tumor stage.

Polyclonal Rabbit Anti-Human

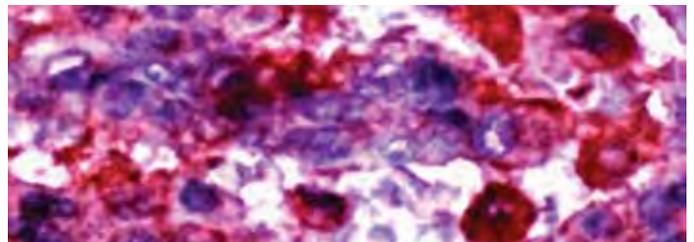
**Extracellular Signal-Regulated Kinase 1 (ERK-1)**

F, P/H

Catalog No.: RP 139 Concentrated 1ml

RP 139-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human breast carcinoma stained with ERK-1 antibody (RP 139).

Immunogen: A synthetic peptide derived from C-terminus of rat ERK-1 protein.

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic

Specificity: Erk-1/extracellular signal-regulated kinase 1/p44 MAP kinase/microtubule-associated protein 2 kinase/myelin basic protein kinase/EGF receptor T669 kinase is ubiquitously expressed in various tissues and cells. It gets activated by phosphorylation of neighboring serine and threonine residues by Mek 1 and Mek2 in response to diverse stimuli like growth factors and mitogens.

Monoclonal Mouse Anti-Human

### Ezrin/p81/Cytovillin

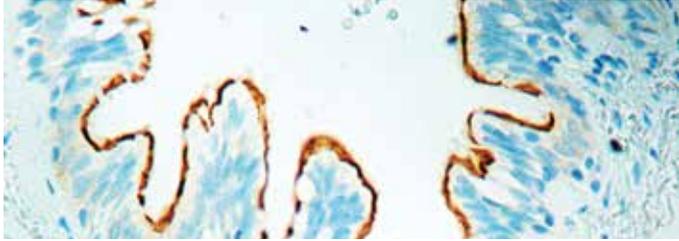
F, P/H

Clone: 3C12

Catalog No.: Mob 380 Concentrated 1ml

Mob 380-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded lung adenocarcinoma stained with Ezrin antibody (Mob 380).

Immunogen: BALB/C mice were immunized with a recombinant fragment of human ezrin corresponding to amino acid 362-585.

Isotype: IgG1

Positive Control: Lung

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a protein of 81 kDa. Ezrin serves as a tyrosine kinase substrate and is phosphorylated in EGF-stimulated cells. Ezrin is a cytoplasmic protein, enriched in microvilli and other cell surfaces. Ezrin has an actin-binding capacity. Ezrin is expressed in epithelial cells but not in mesenchymal cells. Ezrin is also expressed by certain epithelial tumors, such as renal cell adenocarcinomas.

Monoclonal Mouse Anti-Human

### Factor VIII Related Antigen/Von Willebrand Factor

F, P/E

Clone: F8/86

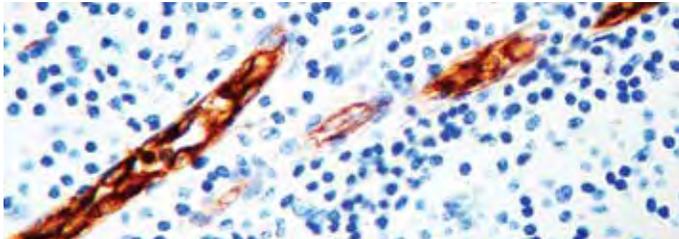
Catalog No.: Mob 196 Concentrated 1ml

Mob 196-05 Concentrated 0.5ml

PDM 019 Prediluted 6ml

PDM019-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Factor VIII Related Antigen antibody (Mob 196).

Immunogen: Von Willebrand factor isolated from human plasma.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with Von Willebrand factor in endothelial cells. It also reacts with megakaryocytes in human bone marrow.

Polyclonal Rabbit Anti-Human

### Factor VIII Related Antigen/Von Willebrand Factor

F, P/E

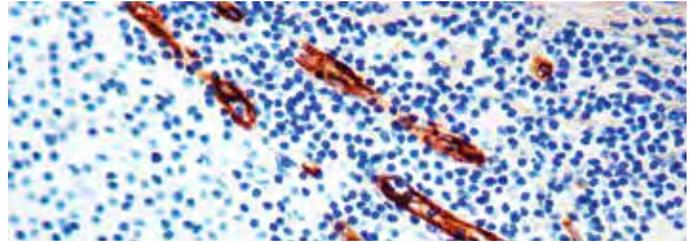
Catalog No.: RP 012 Concentrated 1ml

RP 012-05 Concentrated 0.5ml

PDR 014 Prediluted 6ml

PDR014-10RP Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Factor VIII Related Antigen antibody (RP 012).

Immunogen: Factor VIII related antigen isolated from human plasma.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with human factor VIII related antigen. It stains endothelial cells and megakaryocytes in various human tissues. This antibody does not cross-react with any other cell types.

Monoclonal Mouse Anti-Human

### Factor XIII-A

F, P

Clone: AC-1A1

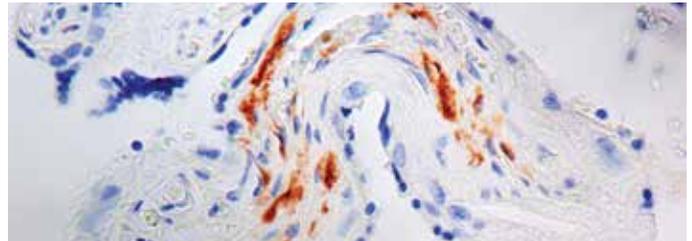
Catalog No.: Mob 321 Concentrated 1ml

Mob 321-05 Concentrated 0.5ml

PDM 141 Prediluted 6ml

PDM141-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human placenta stained with Factor XIII-A antibody (Mob 321).

Immunogen: BALB/C mice were injected with recombinant human protein corresponding to A-subunit of coagulation Factor XIII.

Isotype: IgG1, kappa

Positive Control: Placenta

Cellular Localization: Cytoplasmic, nuclear

Specificity: This antibody is specific to 160 kDa protein known as Factor XIII-A. Factor XIII is a  $\beta$ -globulin found in plasma and is composed of two subunits, Factor XIII-A and Factor XIII-B. Factor XIII-A is the catalytic subunit and is a dimer of M.W. 160 kDa. Factor XIII is a dermal dendrocyte marker and v variable reaction with these types of tumors.

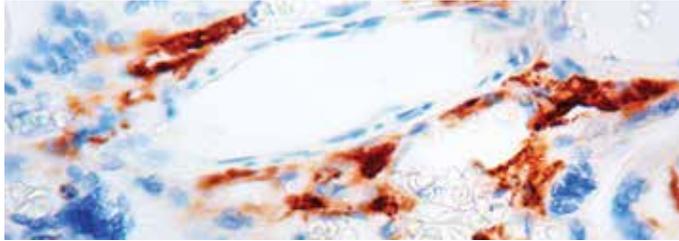
Polyclonal Rabbit Anti-Human

**Factor XIII-A**

F, P/H

Catalog No.: RP 103 Concentrated 1ml  
 RP 103-05 Concentrated 0.5ml  
 PDR 054 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human placenta stained with Factor XIII-A antibody (RP 103).

Immunogen: Recombinant protein corresponding to A-subunit of coagulation Factor XIII a.

Positive Control: Placenta

Cellular Localization: Cytoplasmic, nuclear

Specificity: This antibody reacts with a 160 kDa (unreacted dimer) and 80 kDa (reduced monomer) protein. Factor XIII is a  $\beta$ -globulin found in plasma and is composed of two subunits, Factor XIII-A and Factor XIII-B. Factor XIII-A is the catalytic subunit and is a dimer of M.W. 160 kDa. Factor XIII is a dermal dendrocyte marker and shows variable reaction with these types of tumors. Factor XIII can be used for histiocytic phenotyping and has been reported to mark capillary hemangiomas and tumors of the central nervous system.

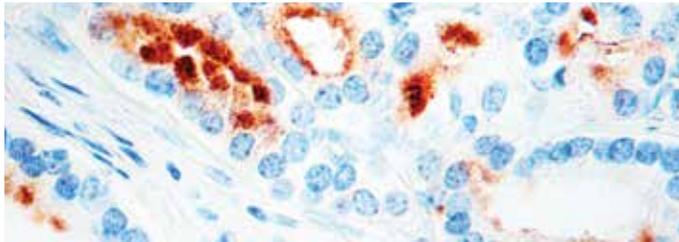
Polyclonal Rabbit Anti-Human

**Fas Ligand**

F, P/H

Catalog No.: RP 142 Concentrated 1ml  
 RP 142-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human prostate stained with Fas Ligand antibody (RP 142).

Immunogen: A synthetic peptide derived from N-terminus of human Fas ligand.

Positive Control: Prostate

Cellular Localization: Cytoplasmic, cell membrane

Specificity: Fas ligand is a cell surface molecule belonging to the tumor necrosis factor family. It binds to its receptor Fas, thus inducing apoptosis. Various cells express Fas, where Fas ligand is expressed predominantly on activated T cells. Fas and Fas ligand are involved in the Downregulation of immune reactions as well as T cell-mediated cytotoxicity.

Monoclonal Mouse Anti-Human

**Fibroblast**

F, P/H/E

Clone: 1B10  
 Catalog No.: Mob 197-1 Concentrated 1ml  
 Mob 197-1-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Cultured human thymic fibroblasts

Isotype: IgM

Positive Control: Thymus

Cellular Localization: Membrane

Specificity: This antibody reacts with proteins of 43 kDa and 72-80 kDa molecular weight. It reacts with a surface protein on fibroblasts (synovial, foreskin and thymic), fibroblast cell lines, tissue macrophages and 95% of peripheral blood monocytes. This antibody does not stain lymphocytes or human epithelial cells, but does stain malignant fibrosarcoma tissue.

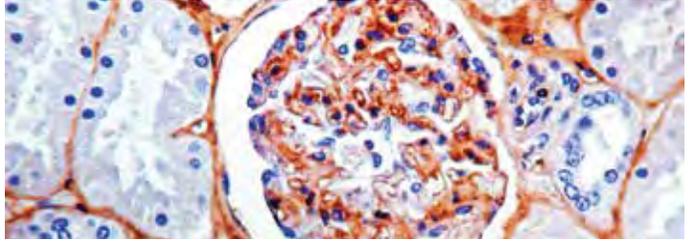
Monoclonal Mouse Anti-Human

**Fibronectin**

F, P/H

Clone: FBN11  
 Catalog No.: Mob 300 Concentrated 1ml  
 Mob 300-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human kidney stained with Fibronectin antibody (Mob 300).

Immunogen: Recombinant fibronectin protein.

Isotype: IgG1

Positive Control: Kidney

Cellular Localization: Basement membrane, connective tissue

Specificity: This antibody is specific to 440 kDa (non-reduced) and 220 kDa (reduced) protein. Fibronectin is a dimeric glycoprotein, which is present in cells, extracellular matrix and blood. Fibronectin is involved in cells adhesion, tissue organization and wound healing.

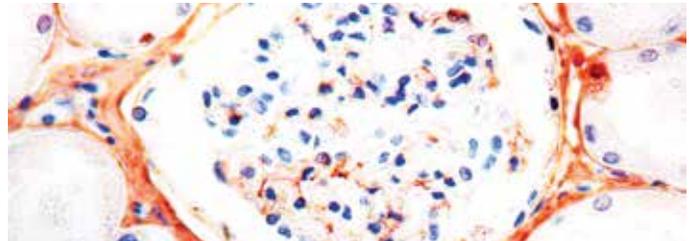
Polyclonal Rabbit Anti-Human

**Fibronectin**

F, P/H/E

Catalog No.: RP 013 Concentrated 1ml  
 RP 013-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human kidney stained with Fibronectin antibody (RP 013).

Immunogen: Fibronectin isolated from a pool of normal human plasma.

Positive Control: Kidney

Cellular Localization: Basement membrane, connective tissue

Specificity: This antibody reacts with human fibronectin in liver, tonsil, skin and kidney. Traces of contaminating antibodies have been removed by solid-phase adsorption. Only the fibronectin arch was observed in crossed immunoelectrophoresis.

Monoclonal Rabbit Anti-Human

**Fli-1**

F, P/H

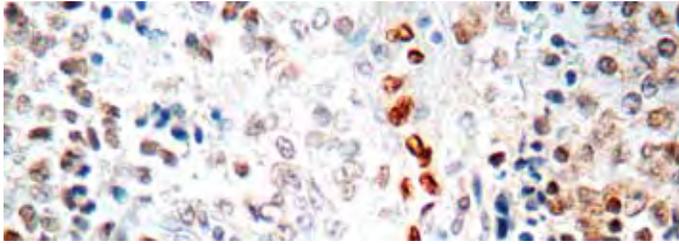
Clone: BV4

Catalog No.: RMAB 025 Concentrated 0.5ml

RMPD 025 Prediluted 6ml

RMPD025-10RM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human synovial sarcoma of foot stained with Fli-1 antibody (RMAB 025).

Immunogen: A synthetic cyclic peptide from the antigen C-terminus.

Isotype: IgG

Positive Control: Angiosarcoma

Cellular Localization: Nuclear

Specificity: Fli-1 protein, a member of the Ets family of DNA binding transcription factors, is involved in cellular proliferation and tumorigenesis. Approximately 90% of Ewing's sarcoma/primitive neuroectodermal tumors (ES/PNET) have a specific translocation, t(11;22)(q24;q12), which results in fusion of EWS to Fli-1, and production of an EWS-Fli-1 fusion protein, which can be detected by this antibody. Among normal tissues only endothelial cells and small lymphocytes express Fli-1. Fli-1 has been found to be expressed in the great majority of vascular tumors including angiosarcomas, hemangioendotheliomas, hemangiomas, and Kaposi's sarcomas. It has been reported that the high sensitivity and specificity of Fli-1 equals or exceeds those of the established vascular markers, CD31, CD34, and Factor VIII. As the first nuclear, rather than cytoplasmic or membranous marker of endothelium, Fli-1 immunostaining also generally lacks cytoplasmic staining artifacts that are the result of endogenous peroxidases or biotin.

Polyclonal Rabbit Anti-Human

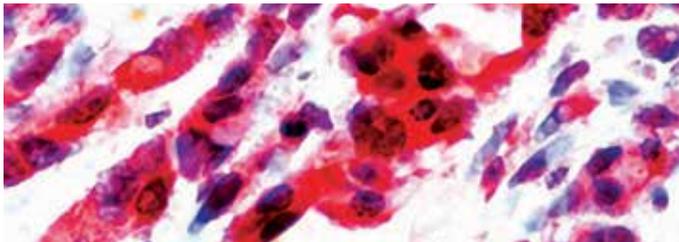
**Flk-1/KDR/VEGFR2**

F, P/H

Catalog No.: RP 076 Concentrated 1ml

RP 076-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human angiosarcoma stained with Flk-1 antibody (RP 076).

Immunogen: A synthetic peptide derived from the C-terminus of the precursor form of the mouse Flk-1.

Positive Control: Angiosarcoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 180 kDa protein, known as Flk-1, KDR or vascular endothelial growth factor receptor 2 (VEGFR2). Flk-1 is a cell membrane receptor kinase. Flk-1 is a high affinity receptor for vascular endothelial growth factor and is putatively involved in the growth of endothelial cells and angiogenesis.

Polyclonal Rabbit Anti-Human

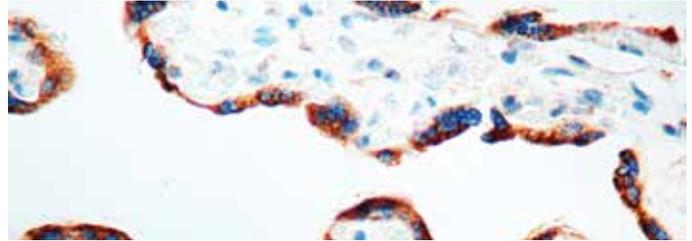
**Flt-1/VEGFR1**

F, P/H

Catalog No.: RP 077 Concentrated 1ml

RP 077-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human placenta stained with Flt-1 antibody (RP 077).

Immunogen: A synthetic peptide derived from the C-terminus of the Flt-1 precursor of human origin.

Positive Control: Angiosarcoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 180 kDa protein, known as Flt-1 or vascular endothelial growth factor receptor 1 (VEGFR1). Flt-1 is a cell membrane receptor kinase. Flk-1 has a high affinity receptor for vascular endothelial growth factor and is putatively involved in the growth of endothelial cells and angiogenesis.

Polyclonal Rabbit Anti-Human

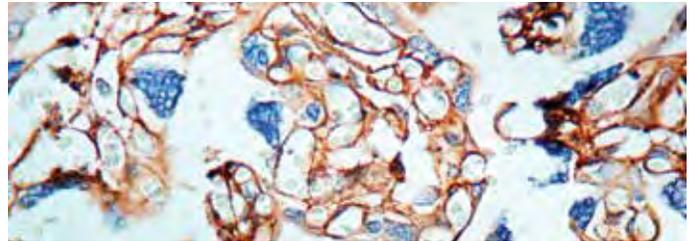
**Flt-4**

F, P/H

Catalog No.: RP 135 Concentrated 1ml

RP 135-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human placenta stained with Flt-4 antibody (RP 135).

Immunogen: A synthetic peptide derived from C-terminus of human Flt-4.

Positive Control: Placenta

Cellular Localization: Cytoplasmic, cell membrane

Specificity: Three cell membrane receptor tyrosine kinases, Flt (also designated VEGFR1), Flk-1 (also designated VEGFR2) and Flt-4 (also designated VEGFR3), putatively involved in the growth of endothelial cells, are characterized by the presence of seven immunoglobulin-like sequences in their extracellular domain. On the basis of structural similarity to Flt and Flk-1, it has been speculated that Flt-4 might represent a third receptor for other VEGF or a VEGF-related ligand.

Monoclonal Mouse Anti-Human

**Galectin-3**

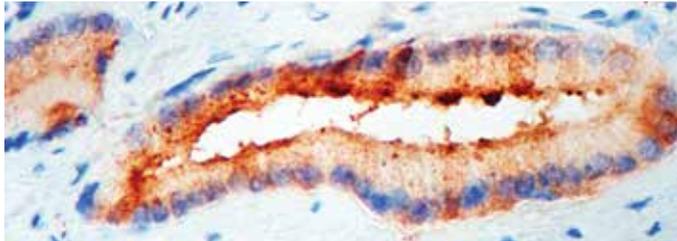
F, P/H

Clone: 9C4

Catalog No.: Mob 405 Concentrated 1ml

Mob 405-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human prostate stained with Galectin-3 antibody (Mob 405).

Immunogen: BALB/C mice were immunized with prokaryotic recombinant fusion protein corresponding to the full-length galectin-3 molecule.

Isotype: IgG1

Positive Control: Prostate

Cellular Localization: Cytoplasmic

Specificity: Galectin-3 is a member of the  $\beta$ -galactosidase binding lectin family. Cell surface galectin-3 may be involved in homotypical cell adhesion and is downregulated in colon and breast cancer. Downregulation of galectin-3 could be one of the many events that enable cancer cells to interact with laminin to facilitate invasion and metastasis. Galectin-3 has been detected in anaplastic large cell lymphomas.

Polyclonal Rabbit Anti-Human

**Gastrin**

F, P

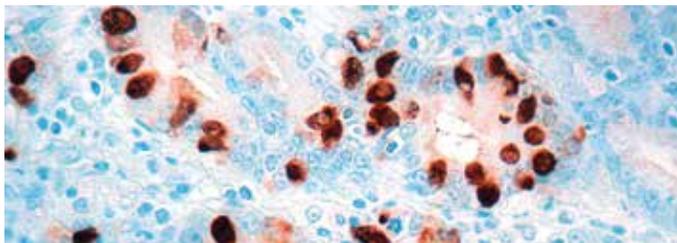
Catalog No.: RP 044 Concentrated 1ml

RP 044-05 Concentrated 0.5ml

PDR 027 Prediluted 6ml

PDR027-10RP Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded stomach stained with gastrin antibody-300dpi (RP 044).

Immunogen: Recombinant gastrin conjugated to KLH.

Positive Control: Stomach

Cellular Localization: Cytoplasmic

Specificity: The antibody is specific against gastrin-containing cells. This anti-body reacts with human gastrin I and human gastrin I fragments. No cross-reactivity was observed with rat gastrin, human big gastrin, human gastrin releasing peptide, sulfated cholecystokinin amide, non-sulfated cholecystokinin amide and cholecystokinin.

Polyclonal Rabbit Anti-Human

**Glial Fibrillary Acidic Protein (GFAP)**

F, P

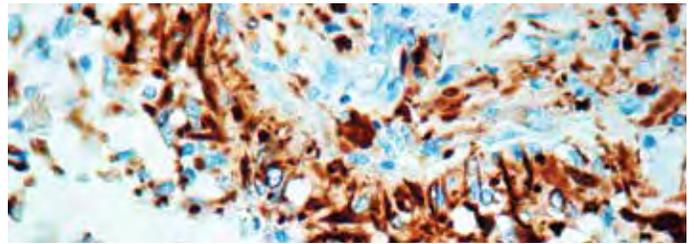
Catalog No.: RP 014 Concentrated 1ml

RP 014-05 Concentrated 0.5ml

PDR 028 Prediluted 6ml

PDR028-10RP Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human brain stained with GFAP antibody (RP 014).

Immunogen: Glial fibrillary protein isolated from cow spinal cord.

Positive Control: Brain

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with human GFAP. In the central nervous system, this antibody stains astrocytes and some groups of ependymal cells. However, in the peripheral nervous system, it stains Schwann cells, satellite cells and enteric glial cells.

Monoclonal Mouse Anti-Human

**Glial Fibrillary Acidic Protein (GFAP)**

F, P

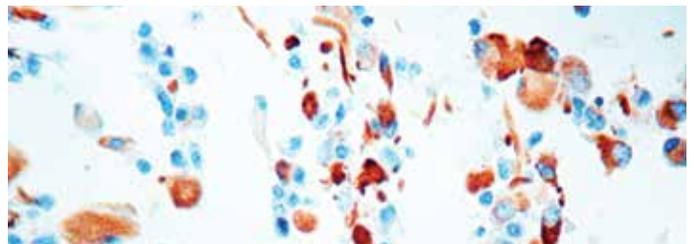
Clone: 6F2

Catalog No.: Mob 199 Concentrated 1ml

Mob 199-05 Concentrated 0.5ml

PDM 078 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human brain stained with GFAP antibody (Mob 199).

Immunogen: Glial fibrillary acidic protein from human brain.

Isotype: IgG1, kappa

Positive Control: Brain

Cellular Localization: Cytoplasm

Specificity: This antibody is specific to a 52 kDa intermediate filament protein in brain and spinal cord. It stains astrocytes and CNS ependymal cells but does not stain oligodendrocytes or neurons. This antibody does not cross-react with any other intermediate filament proteins.



At DBS, each antibody is quality control tested to cGMP standards.

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Monoclonal Mouse Anti-Human

### Glial Fibrillary Acidic Protein (GFAP) **F, P**

Clone: GA5

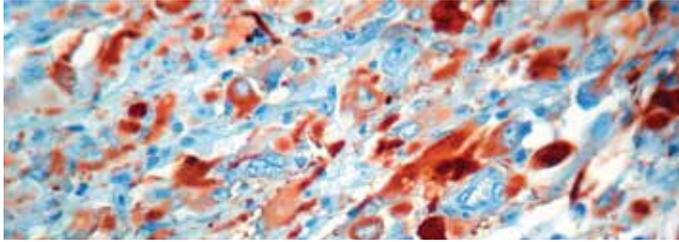
Catalog No.: Mob 064 Concentrated 1ml

Mob 064-05 Concentrated 0.5ml

PDM 008 Prediluted 6ml

PDM008-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human brain stained with GFAP antibody (PDM 008).

Immunogen: BALB/C mice were immunized with glial fibrillary protein from porcine spinal cord.

Isotype: IgG1, kappa

Positive Control: Brain

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with the 52 kDa intermediate filament protein GFAP in brain and spinal cord. It labels some astrocytes and some CNS ependymal cells but not oligodendrocytes or neurons. This antibody does not react with other intermediate filament proteins.

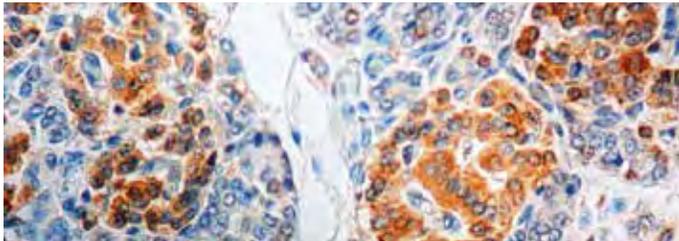
Polyclonal Rabbit Anti-Human

### Glutamate Decarboxylate 65 (GAD65) **F, P/H**

Catalog No.: RP 075 Concentrated 1ml

RP 075-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human brain stained with (GAD65) antibody (RP 075).

Immunogen: A synthetic peptide derived from the C-terminus region of the human GAD65 protein.

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 65 kDa protein, known as glutamate decarboxylase (GAD). Two forms of GAD exist in adults, GAD65 and GAD67, which are encoded by different genes. GAD65 and GAD67 are expressed in most GABA containing neurons. GAD65 appears to be targeted to the membrane and nerve ending, where as GAD67 is more widely distributed throughout the cell.

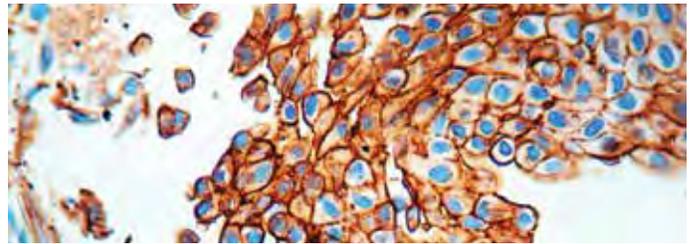
Polyclonal Rabbit Anti-Human

### GLUT-1 **F, P/H**

Catalog No.: RP 128 Concentrated 1ml

RP 128-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human bladder stained with GLUT-1 antibody (RP 128).

Immunogen: A synthetic peptide derived from C-terminal of human GLUT-1.

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 55 kDa protein. Glucose is fundamental to the metabolism of mammalian cells. Several glucose transporter protein (Glut) isoforms have been identified and shown to function in response in insulin and IGF-1 induced signaling. GLUT-1 is detectable in many human tissues including those of the colon, lung, stomach, esophagus and breast. GLUT-1 immunoreactivity in some cancers, including trans-carcinoma of the urinary bladder, has been associated with aggressive behavior.

Monoclonal Mouse Anti-Human

### Glycophorin A **F, P**

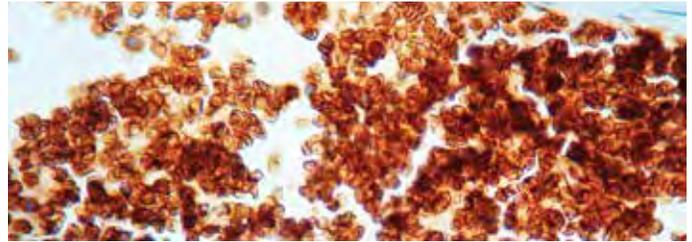
Clone: JC159

Catalog No.: Mob 066 Concentrated 1ml

Mob 066-05 Concentrated 0.5ml

PDM 124 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Glycophorin A antibody (Mob 066).

Immunogen: BALB/C mice were immunized with formalin fixed membrane from a hairy cell leukemia.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to erythroid cells at various stages of differentiation from the erythroblast to the mature red cell.

Monoclonal Mouse Anti-Human

### Glycophorin C

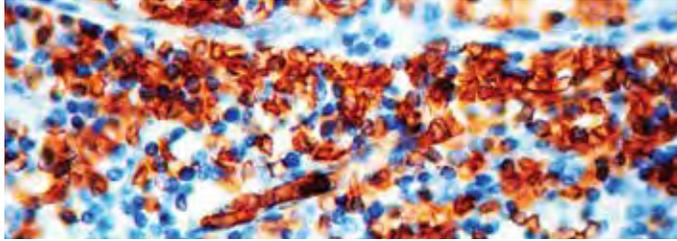
Clone: Ret40f

Catalog No.: Mob 067 Concentrated 1ml

Mob 067-05 Concentrated 0.5ml

F, P

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Glycophorin C antibody (Mob 067).

Immunogen: BALB/C mice were injected with red cell ghosts.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody is specific to  $\beta$  sialoglycophorin also known as glycophorin C. Glycophorin C is found on the human erythrocyte membrane and is one of four sialic acid-rich polypeptides.

Monoclonal Mouse Anti-Human

### Granulocyte

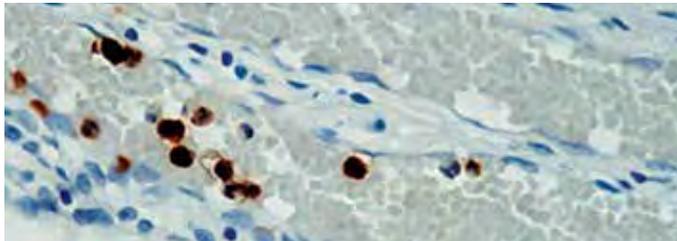
Clone: BM-2

Catalog No.: Mob 268 Concentrated 1ml

Mob 268-05 Concentrated 0.5ml

F, P

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Granulocyte antibody (Mob 268).

Immunogen: BALB/C mice were immunized with nuclei from pokeweed mitogen stimulated human peripheral blood lymphocytes.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to mature granulocytes. It does not react with other types of cells in human tissues. Antibody clone BM2 reacts with early precursor and mature forms of human myeloid cells. This antibody is useful in the detection of myeloid leukemia and granulocytic sarcoma.

Monoclonal Mouse Anti-Human

### Granzyme B

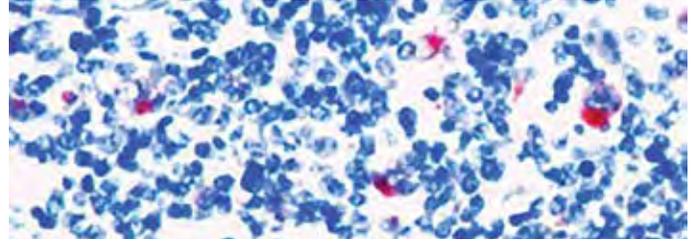
Clone: GZB01

Catalog No.: Mob 366 Concentrated 1ml

Mob 366-05 Concentrated 0.5ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human Hodgkin lymphoma stained with Granzyme B antibody (Mob 366).

Immunogen: BALB/C mice were injected with recombinant protein encoding the N-terminus of the mature granzyme B.

Isotype: IgG2a

Positive Control: Hodgkin lymphoma

Cellular Localization: Granular cytoplasmic

Specificity: This antibody reacts with a 32 kDa protein. Granzymes are neutral serine proteases, which are stored in specialized lytic granules of cytotoxic T lymphocytes (CTL) and in natural killer (NK) cells. A number of granzymes (A to G) have been isolated and cloned. Human granzyme B is involved in target cell apoptosis during lymphocyte-mediated cytotoxicity. This antibody is useful in the localization of granzyme B containing lytic granules and for the characterization of activated CTL or NK cells.

Polyclonal Rabbit Anti-Human

### Granzyme B

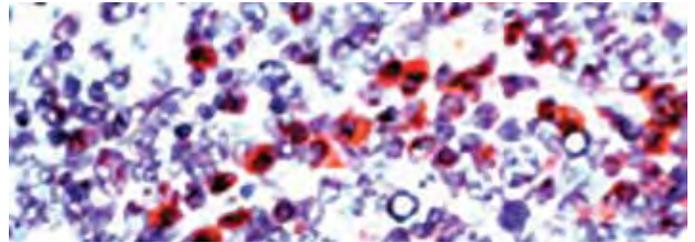
Catalog No.: RP 105 Concentrated 1ml

RP 105-05 Concentrated 0.5ml

PDR 050 Prediluted 6 ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Granzyme B antibody (RP 105).

Immunogen: A synthetic peptide from the N-terminus of human granzyme B.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 32 kDa protein. Granzymes are neutral serine proteases, which are stored in specialized lytic granules of cytotoxic T lymphocytes (CTL) and in natural killer (NK) cells. A number of granzymes (A to G) have been isolated and cloned. Human granzyme B is involved in target cell apoptosis during lymphocyte-mediated cytotoxicity. This antibody is useful in the localization of granzyme B containing lytic granules and for the characterization of activated CTL or NK cells.

Monoclonal Mouse Anti-Human

### Gross Cystic Disease Fluid Protein-15 (GCDP-15)

F, P/H

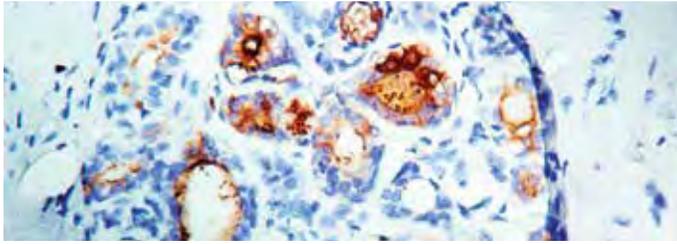
Clone: 23A3

Catalog No.: Mob 307 Concentrated 1ml

Mob 307-05 Concentrated 0.5ml

PDM 108 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded breast carcinoma stained with GCDP-15 (PDM 108).

Immunogen: Recombinant protein encoding the excreted domain of human GCDP-15.

Isotype: IgG2a, kappa

Positive Control: Skin, Breast carcinoma

Cellular localization: Cytoplasmic

Specificity: This antibody is specific to 15 kDa monomer protein called gross cystic disease fluid protein-15 (GCDP-15). Gross cystic disease of the breast is a benign premenopausal disorder in which cysts are predominant. These cysts appear to be formed from excessive apocrine cystic secretions, one of which is GCDP-15. This antibody can be used in the staining of breast carcinoma, salivary duct carcinoma and apocrine epithelia.

Monoclonal Mouse Anti-Human

### Hairy Cell Leukemia

F, P/H

Clone: DBA.44

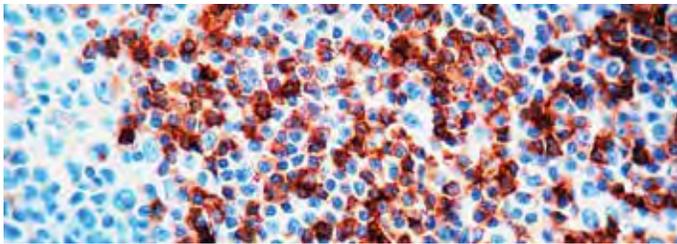
Catalog No.: Mob 200 Concentrated 1ml

Mob 200-05 Concentrated 0.5ml

PDM 024 Prediluted 6ml

PDM024-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Hairy Cell Leukemia antibody (PDM 024).

Immunogen: DEAU cell line established from a large cell lymphoma.

Isotype: IgM, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane, cytoplasmic

Specificity: This antibody reacts with a subset of B-lymphocytes localized in the follicular mantle zone. It reacts with 97% of hairy cell leukemia cases. This antibody shows strong positive staining of about 35% of cases of high grade B cell lymphomas.

Monoclonal Mouse Anti-Human

### Heat Shock Protein 60

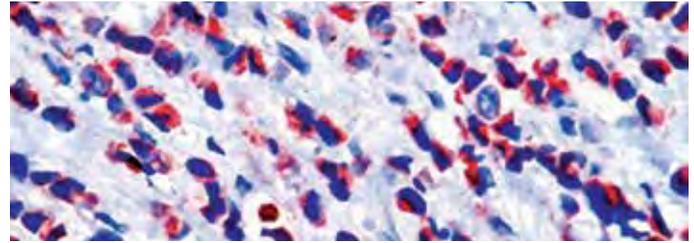
F, P/H

Clone: LK 1

Catalog No.: Mob 313 Concentrated 1ml

Mob 313-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast carcinoma stained with Heat Shock Protein 60 antibody (Mob 313).

Immunogen: BALB/C mice were injected with recombinant HSP 60 protein.

Isotype: IgG1

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 60 kDa protein, HSP60. HSP60 is a potential antigen in a number of autoimmune diseases including human arthritis. This antibody recognizes only mammalian HSP60 and not bacterial HSP60.

Monoclonal Mouse Anti-Human

### Heat Shock Protein 70 (HSP 70)

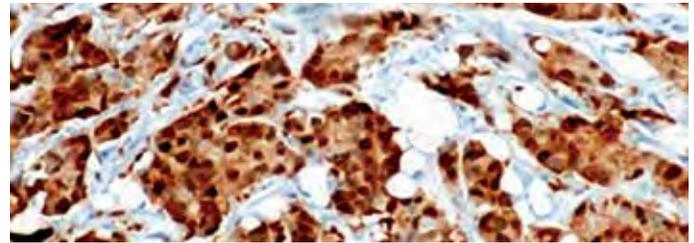
F, P/H

Clone: W27

Catalog No.: Mob 269 Concentrated 1ml

Mob 269-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast carcinoma stained with Heat Shock Protein 70 antibody (Mob 269).

Immunogen: BALB/C mice were injected with purified HSP70 protein.

Isotype: IgG2a

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic and nuclear

Specificity: This antibody is specific to constitutive (HSP73) and inducible (HSP72) form of HSP70. HSP70 is found to be associated with steroid receptors, actin, p53, polyoma T antigen, nucleotides and other known proteins. HSP70 has been shown to be involved in protective roles against thermal stress, cytotoxic drugs and other damaging conditions.



## Did you know?

Every single part of a dandelion is extremely useful. The main four parts; roots, leaves, flowers, and stem are used either for medicinal or culinary purposes.

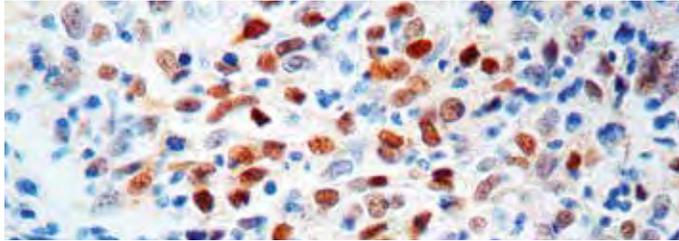
DBS is defined by four key principles: straightforward business practices, financial conservatism, a high ethical standard and, most of all, passion. ■

Polyclonal Rabbit Anti-Human  
**Heat Shock Protein 70 (HSP 70)**

F, P

Catalog No.: RP 015 Concentrated 1ml  
RP 015-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded breast carcinoma stained with HSP-70 antibody (RP 015).

Immunogen: Purified heat shock protein (DnaK) from E. coli.  
Positive Control: Breast carcinoma  
Cellular Localization: Cytoplasmic, nuclear  
Specificity: This antibody reacts with the two major human HSP70s (HSP72 and HSP73). It stains epithelial cells in many different tissues (e.g. tonsil, stomach, small and large intestine, bile ducts, ovary and prostate).

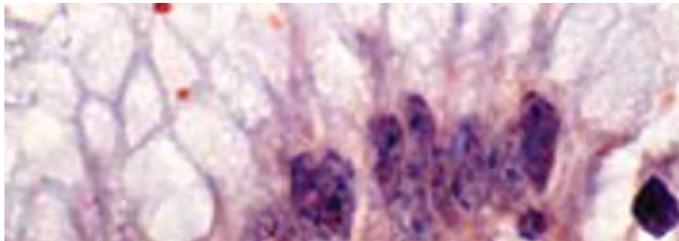
Polyclonal Rabbit Anti-Human

**Helicobacter Pylori**

F, P

Catalog No.: RP 016 Concentrated 1ml  
RP 016-05 Concentrated 0.5ml  
PDR 053 Prediluted 6ml  
PDR053-10RP Prediluted 10ml 360

Regulatory Status: ASR



Formalin fixed paraffin embedded human stomach infected with H. pylori and stained with H. pylori antibody (RP 016).

Immunogen: Total lysate of H. pylori.  
Positive Control: Infected stomach  
Cellular Localization: Cytoplasmic  
Specificity: This antibody reacts with the whole H. pylori. The antibody stains the bacteria present on the surface of the epithelium or in the cytoplasm of the epithelial cells. H. pylori is known to cause peptic ulcer and chronic gastritis in humans.

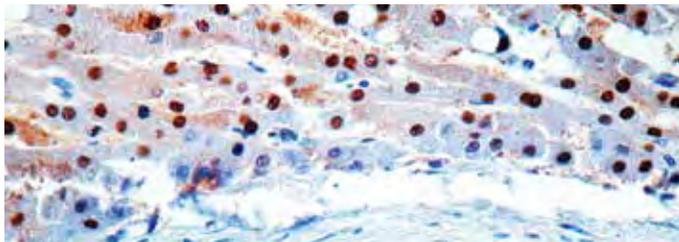
Polyclonal Rabbit Anti-Human

**Hepatitis B Core Antigen (HBcAg)**

F, P

Catalog No.: RP 017 Concentrated 1ml  
RP 017-05 Concentrated 0.5ml  
PDR 020 Prediluted 6ml  
PDR020-10RP Prediluted 10ml 360

Regulatory Status: ASR



Formalin fixed paraffin embedded infected liver stained with HBcAg antibody (RP 017).

Immunogen: HBcAg purified from the lysates of E. coli infected with the viral core DNA.  
Positive Control: Infected liver  
Cellular Localization: Nuclear  
Specificity: This antigen reacts in the nuclei of the liver cells of the hepatitis type B virus infected patients. However, occasional staining may also be seen in the perinuclear cytoplasm of the infected cells.

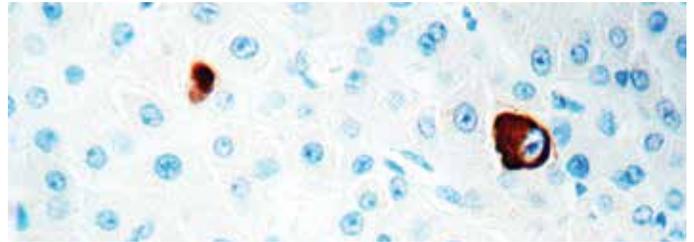
Monoclonal Mouse Anti-Human

**Hepatitis B Surface Antigen (HBsAg)**

F, P

Clone: 3E7  
Catalog No.: Mob 125 Concentrated 1ml  
Mob 125-05 Concentrated 0.5ml  
PDM 079 Prediluted 6ml  
PDM079-10MM Prediluted 10ml 360

Regulatory Status: ASR



Formalin fixed paraffin embedded infected liver stained with HBsAg antibody (Mob 125).

Immunogen: Purified HBsAg subtype ayw3.  
Isotype: IgG1  
Positive Control: Infected liver  
Cellular Localization: Cytoplasmic  
Specificity: This antibody stains the cytoplasm of antigen-positive liver cells in patients with Type B viral hepatitis. This antibody reacts with the 'a' determinant present on the HBsAg subtypes ayw1, ayw2, ayw3, ayw4, ayr, adw2, adw4 and adr. It does not react with normal tissues.

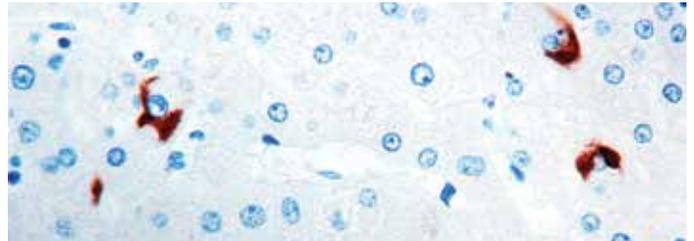
Polyclonal Goat Anti-Human

**Hepatitis B Surface Antigen (HBsAg)**

F, P

Catalog No.: GP 001 Concentrated 1ml  
GP 001-05 Concentrated 0.5ml  
PDR 031 Prediluted 6ml

Regulatory Status: ASR



Formalin fixed paraffin embedded infected liver stained with HBsAg antibody (GP 001).

Immunogen: Purified surface antigen of subtype ad/ay.  
Positive Control: Infected liver  
Cellular Localization: Cytoplasmic  
Specificity: This antigen reacts with liver cells of the patients infected with hepatitis type B virus as well as with hepatocellular carcinoma and cirrhosis.

Monoclonal Mouse Anti-Human

### Hepatocyte Specific Antigen

F, P

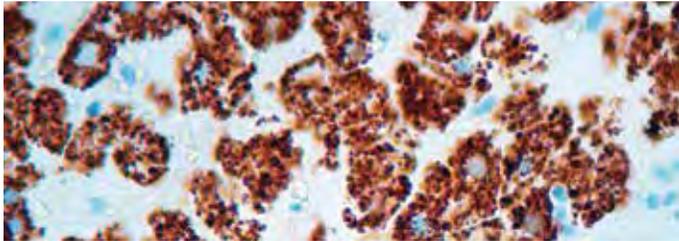
Clone: OCH1E5

Catalog No.: Mob 426 Concentrated 1ml

Mob 426-05 Concentrated 0.5ml

PDM 162 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded liver stained with Hepatocyte Specific Antigen antibody (Mob 426).

Immunogen: Human liver fixed in formalin.

Isotype: IgG1

Positive Control: Liver

Cellular Localization: Cytoplasmic

Specificity: Hepatoblastoma is the most common primary tumor of the liver in children. The use of specific hepatocyte markers and also of a fetoprotein or carcinoembryonic antigen are useful for the identification of normal and malignant fetal hepatocytes. This antibody recognizes an uncharacterized antigen present in both adults and fetal normal hepatocytes to produce a distinct granular cytoplasmic staining. This antibody stains majority of hepatocellular carcinomas.

Monoclonal Rabbit Anti-Human

### HER2/neu

F, P

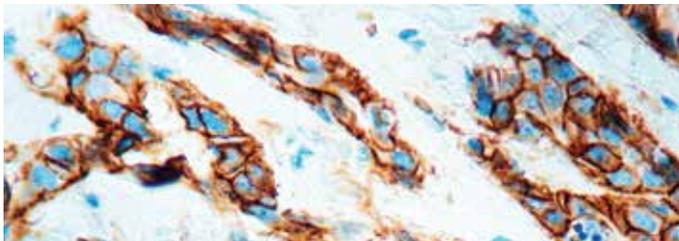
Clone: BV5

Catalog No.: RMAB 026 Concentrated 0.5ml

RMPD 026 Prediluted 6ml

RMPD026-10RM Prediluted 10ml 360

Regulatory Status: ASR



Formalin fixed paraffin embedded breast carcinoma stained with HER2/neu antibody (RMAB 026).

Immunogen: A synthetic cyclic peptide from the antigen C-terminus.

Isotype: IgG

Positive Control: Breast carcinoma

Cellular Localization: Cell Membrane

Specificity: HER2/neu (also known as c-erbB-2) is a member of the epidermal growth factor receptor (EGFR) family and is notable for its role in the pathogenesis of breast cancer and as a target of treatment. It is a cell membrane surface-bound tyrosine kinase and is normally involved in the signal transduction pathways leading to cell growth and differentiation. HER2 is a proto-oncogene located on the long arm of human chromosome 17(17q11.2-q12). Approximately 25-30 percent of breast cancers have an amplification of the HER2/neu gene or overexpression of its protein product. Overexpression of this receptor in breast cancer is associated with increased disease recurrence and worse prognosis. Because of its prognostic role as well as its ability to predict response to trastuzumab, breast tumors are routinely checked for overexpression of HER2/neu. Overexpression also occurs in other cancer such as osteosarcoma, ovarian cancer and stomach cancer.

Monoclonal Mouse Anti-Human

### Heregulin/ NDF/ GGF/ Neuregulin

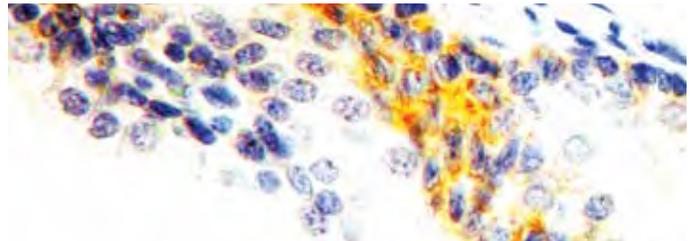
F, P/H

Clone: 7D5

Catalog No.: Mob 343 Concentrated 1ml

Mob 343-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded prostate carcinoma stained with Heregulin antibody (Mob 343).

Immunogen: BALB/C mice were injected with a recombinant extracellular domain of rat NDF protein.

Isotype: IgG2a

Positive Control: Prostate carcinoma

Cellular Localization: Cytoplasmic, intercellular spaces

Specificity: This antibody reacts with a 44 kDa protein known as heregulin or neu differentiation factor (NDF). Heregulin binds to c-erbB-3 and c-erbB-4 receptors on mammary and neuronal cells with low and high affinities, respectively. HRG/NDF exists in several isoforms, which are classified in two groups,  $\alpha$  and  $\beta$  that differ in their EGF-like domain and in receptor binding affinity.

Monoclonal Mouse Anti-Human

### Herpes Simplex Virus Type I (HSV1)

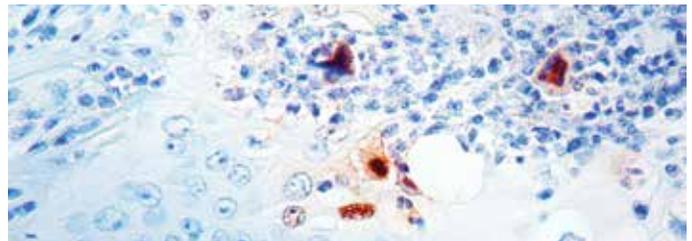
F, P

Clone: 20.7.1

Catalog No.: PDM 080 Prediluted 6ml

PDM080-10MM Prediluted 10ml 360

Regulatory Status: ASR



Formalin fixed paraffin embedded tissue stained with HSV1 antibody (PDM 080).

Immunogen: BALB/C mice were immunized with Stoker strain of herpes simplex virus type 1.

Isotype: IgG1, kappa

Positive Control: Infected lung

Cellular Localization: Cytoplasmic, nuclear

Specificity: This antibody reacts with herpes simplex virus type 1. This antibody cross-reacts with some strains of poliovirus type 2 and CMV strain AD169. It does not show any cross-reaction with tissue culture isolates of RSV, influenza virus type A and B, arainfluenza virus type 1,2,3 and 4b, adenovirus, HSV2, varicella-zoster virus, mumps virus and measles virus.

Polyclonal Rabbit Anti-Human

### Herpes Simplex Virus Type I (HSV1)

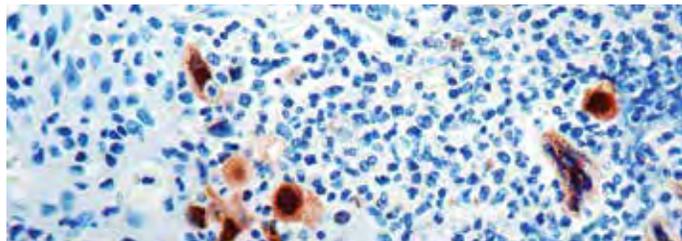
F, P

Catalog No.: RP 018 Concentrated 1ml

RP 018-05 Concentrated 0.5ml

PDR 032 Prediluted 6ml

Regulatory Status: ASR



Formalin fixed paraffin embedded tissue stained with HSV I antibody (RP 018).

Immunogen: Whole rabbit corneal cells, infected with herpes simplex virus type I (strain Mac Intyre), were solubilized with detergent.

Positive Control: Infected tissue

Cellular Localization: Cytoplasmic, nuclear

Specificity: This antibody reacts with HSV type I specific antigens and with antigens common to HSV type I and II virus. It reacts with all the major glycoproteins present in the viral envelope as well as with at least one core protein.

Polyclonal Rabbit Anti-Human

### Herpes Simplex Virus Type I & II (HSV1 & 2)

F, P

Catalog No.: RP 162 Concentrate 1 ml

RP 162-05 Concentrate 0.5 ml

Regulatory Status:RUO

Immunogen: Whole rabbit corneal cells, infected with herpes simplex virus type I (strain Mac Intyre) and type II (strain M5), were solubilized with detergent.

Positive Control: Infected tissue

Cellular Localization: Cytoplasmic and nuclear

Specificity: This antibody reacts with HSV type I and II specific antigens and with antigens common to HSV type I and II virus. It reacts with all major glycoproteins present in the viral envelope and with at least one core protein.

Monoclonal Mouse Anti-Human

### Herpes Simplex Virus Type II (HSV2)

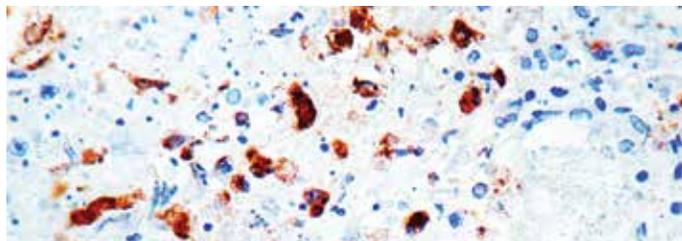
F, P

Clone: 12.3.4 + 1.1.1

Catalog No.: PDM 081 Prediluted 6ml

PDM081-10MM Prediluted 10ml 360

Regulatory Status: ASR



Formalin fixed paraffin embedded tissue stained with HSV II antibody (PDM 081).

Immunogen: BALB/C mice were immunized with Parker strain of herpes simplex virus type 2.

Isotype: 12.3.4, IgG1, lambda; 1.1.1, IgG1, kappa

Positive Control: Infected lung

Cellular Localization: Cytoplasmic, nuclear

Specificity: This antibody reacts with herpes simplex virus type 2. It does not show any cross-reaction with tissue culture isolates of RSV, influenza virus type A and B, parainfluenza virus type 1,2,3 and 4b, adenovirus, HSV1, varicella-zoster virus, mumps virus and measles virus.

Polyclonal Rabbit Anti-Human

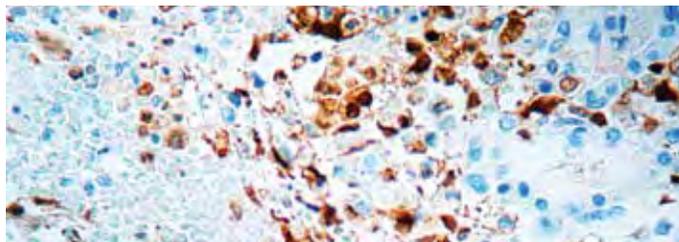
### Herpes Simplex Virus Type I & II (HSV1 & HSV2)

F, P

Catalog No.: PDR 034 Prediluted 6ml

PDR034-10RP Prediluted 10ml 360

Regulatory Status: RUO



Formalin fixed paraffin embedded tissue stained with HSV I, II antibody (PDR 034).

Immunogen: Whole rabbit corneal cells, infected with herpes simplex virus type I (strain Mac Intyre) and type II (strain M5), were solubilized with detergent.

Positive Control: Infected tissue

Cellular Localization: Cytoplasmic, nuclear

Specificity: This antibody reacts with HSV type I and II specific antigens and with antigens common to HSV type I and II virus. It reacts with all the major glycoproteins present in the viral envelope as well as with at least one core protein.

Polyclonal Rabbit Anti-Human

### Herpes Simplex Virus Type II (HSV2)

F, P

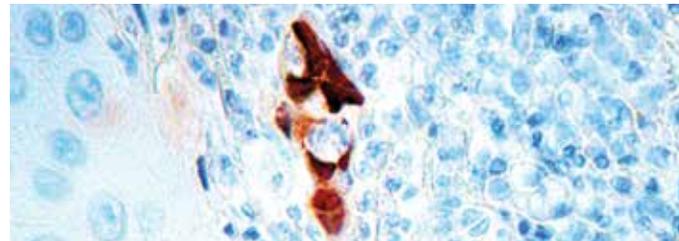
Catalog No.: RP 019 Concentrated 1ml

RP 019-05 Concentrated 0.5ml

PDR 033 Prediluted 6ml

PDR033-10RP Prediluted 10ml 360

Regulatory Status: ASR



Formalin fixed paraffin embedded tissue stained with HSV II antibody (RP 019).

Immunogen: Whole rabbit corneal cells, infected with herpes simplex virus type II (strain M5), were solubilized with detergent.

Positive Control: Infected tissue

Cellular Localization: Cytoplasmic, nuclear

Specificity: This antibody reacts with HSV type II specific antigens and with antigens common to HSV type I and II virus. It reacts with all the major glycoproteins present in the viral envelope as well as with at least one core protein.

Monoclonal Rat Anti-Human

### Herpesvirus 8 (HHV8)

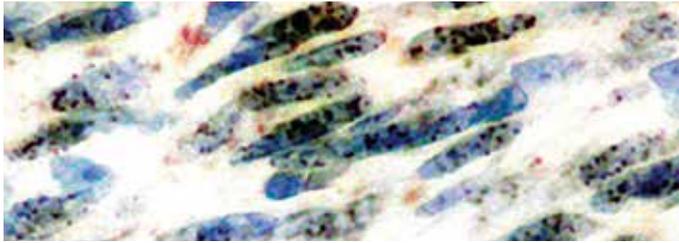
Clone: LN53

Catalog No.: Mob 395 Concentrated 1ml

Mob 395-05 Concentrated 0.5ml

F, P

Regulatory Status: ASR



Cultured cells infected with HHV8 stained with HHV8 antibody (Mob 395).

Immunogen: Recombinant protein corresponding to the latent nuclear antigen-1 molecule of HHV8.

Isotype: IgG2c

Positive Control: Kaposi sarcoma

Cellular Localization: Nuclear

Specificity: This antibody stains with ORF-73 of human herpesvirus 8 (HHV8). HHV8 is the likely etiological agent of Kaposi sarcoma (KS). HHV8 encodes a latent nuclear antigen (LNA), which is the product of the viral gene ORF 73. LNA is capable of forming a complex with retinoblastoma susceptibility gene product, which may be related to its oncogenic activity.

Monoclonal Mouse Anti-Human

### HLA-DR ( $\beta$ chain of DP, DQ & DR)

Clone: CR3/43

Catalog No.: Mob 069 Concentrated 1ml

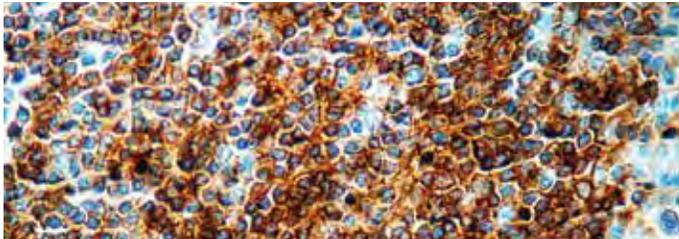
Mob 069-05 Concentrated 0.5ml

PDM 082 Prediluted 6ml

PDM082-10MM Prediluted 10ml 360

F, P

Regulatory Status: ASR



Formalin fixed paraffin embedded human tonsil stained with HLA-DR antibody (Mob 069).

Immunogen: Tonsil cells

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with the  $\beta$  chain of all products of the gene sub regions DP, DQ, and DR. It stains B cells, interdigitating reticulum cells, Langerhans cells and many macrophages. This antibody does not react with normal T cell and polymorphs but stains activated T cells.

Monoclonal Mouse Anti-Human

### Human Papilloma Virus Type 16 (HPV 16)

Clone: CAMVIR-1

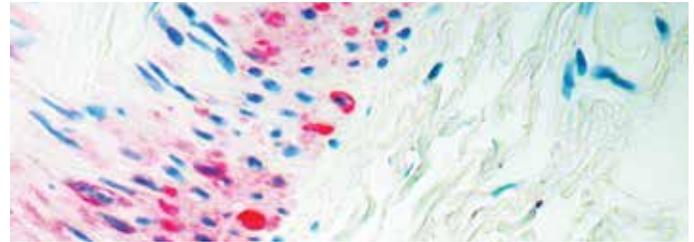
Catalog No.: Mob 394 Concentrated 1ml

Mob 394-05 Concentrated 0.5ml

PDM 166 Prediluted 6ml

F, P/H

Regulatory Status: ASR



Formalin fixed paraffin embedded cervix stained with HPV-16 antibody (Mob 394).

Immunogen: BALB/C mice were immunized with recombinant HPV-16 L1 protein.

Isotype: IgG2a

Positive Control: HPV type 16 infected cervix

Cellular Localization: Nuclear

Specificity: This antibody stains with HPV type 16. L1 protein is a major capsid protein of HPV type 16. HPV 6 and 11 have been associated with relatively benign diseases such as genital warts but type 16 and 18 are strongly associated with cervical, vaginal and vulvar malignancies.

Monoclonal Mouse Anti-Human

### Hypoxia-Inducible Factor- $\alpha$ (HIF-1 $\alpha$ )

F

Catalog No.: Mob 311 Concentrated 1ml

Mob 311-05 Concentrated 0.5ml

Regulatory Status: ASR

Immunogen: BALB/C mice were injected with hHIF-1 $\alpha$  (aa 530-826) protein.

Isotype: IgG1, kappa

Positive Control: Mammalian cells

Cellular Localization: Nuclear

Specificity: This antibody is specific to a 120 kDa protein HIF-1, which is a heterodimer consisting of an  $\alpha$  and a  $\beta$  subunit. HIF-1 is a key component of a transcriptional response activated by hypoxia, cobaltous ions and iron chelation. HIF-1 activates transcription of hypoxia-inducible genes.

Polyclonal Rabbit Anti-Human

### IgA

F, P/H

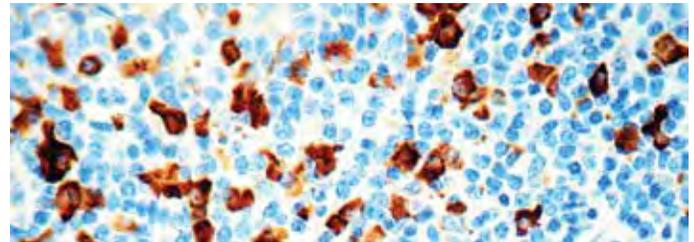
Catalog No.: RP 020 Concentrated 1ml

RP 020-05 Concentrated 0.5ml

PDR 017 Prediluted 6ml

PDR017-10RP Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with IgA antibody (RP 020).

Immunogen: IgA isolated from a pool of normal human sera.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

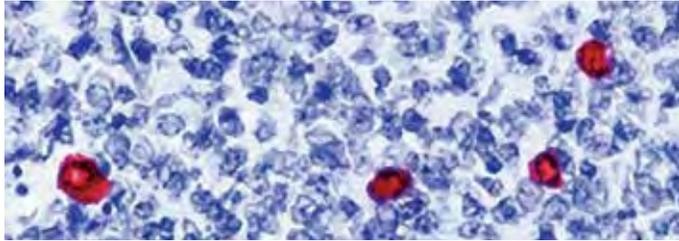
Specificity: This antibody reacts with  $\alpha$ -chains of human IgA. This antibody has been adsorbed to a very high level of specificity.

Polyclonal Rabbit Anti-Human

**IgD** F, P/E

Catalog No.: RP 021 Concentrated 1ml  
RP 021-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with IgD antibody (RP 021).

Immunogen: IgD isolated from a pool of normal human plasma.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

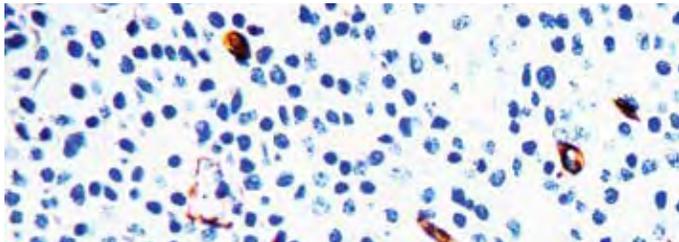
Specificity: This antibody reacts with the  $\delta$  chain of human IgD. Traces of contaminating antibodies have been removed by solid phase adsorption. Only the IgD arch appeared in crossed immunoelectrophoresis.

Polyclonal Rabbit Anti-Human

**IgE** F, P/E

Catalog No.: RP 022 Concentrated 1ml  
RP 022-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with IgE antibody (RP 022).

Immunogen: IgE isolated from the serum of a patient with IgE-myeloma.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

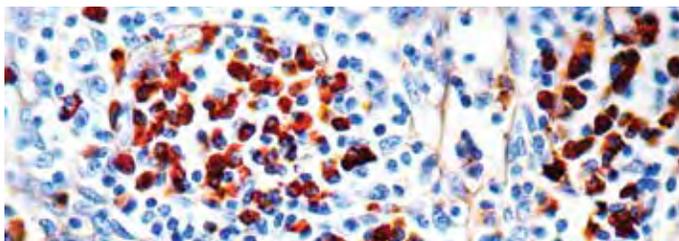
Specificity: This antibody reacts with the  $\epsilon$  chain of human IgE. Traces of contaminating antibodies have been removed by solid phase adsorption. Only the IgE arch appeared in crossed immunoelectrophoresis.

Polyclonal Rabbit Anti-Human

**IgG** F, P/E

Catalog No.: RP 023 Concentrated 1ml  
RP 023-05 Concentrated 0.5ml  
PDR 018 Prediluted 6ml  
PDR018-10RP Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with IgG antibody (RP 023).

Immunogen: IgG isolated from a pool of normal human sera.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with  $\gamma$ -chains of human IgG. Nonspecific antibodies have been removed by solid-phase adsorption.

Monoclonal Mouse Anti-Human

**IgM** F, P/E

Clone: R1/69  
Catalog No.: Mob 074 Concentrated 1ml  
Mob 074-05 Concentrated 0.5ml  
PDM 053 Prediluted 6ml

Regulatory Status: IVD

Immunogen: Human lymphoid cells.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cytoplasm

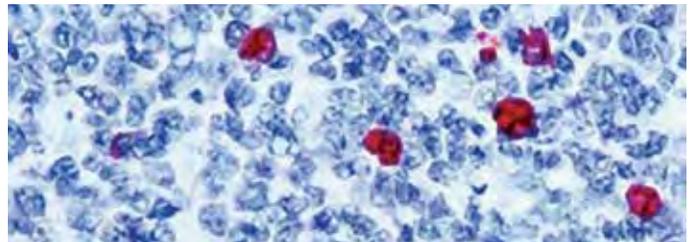
Specificity: This antibody reacts with the heavy chain present in all types of human IgM. It stains B cell follicles in human lymphoid tissues. In lymphoid tissues, IgM containing plasma cells stain strongly but immune complexes are usually undetectable.

Polyclonal Rabbit Anti-Human

**IgM** F, P/E

Catalog No.: RP 024 Concentrated 1ml  
RP 024-05 Concentrated 0.5ml  
PDR 019 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with IgM antibody (RP 024).

Immunogen: IgM isolated from human serum of a patient.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

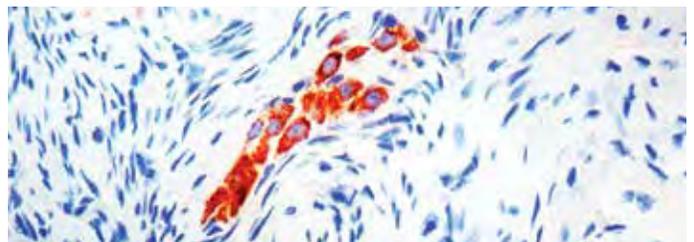
Specificity: This antibody reacts with the  $\mu$ -chains of human IgM. Nonspecific antibodies have been removed by solid-phase adsorption.

Monoclonal Mouse Anti-Human

**Inhibin  $\alpha$**  F, P/H

Clone: R1  
Catalog No.: Mob 435 Concentrated 1ml  
Mob 435-05 Concentrated 0.5ml  
PDM 178 Prediluted 6ml  
PDM178-10MM Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human ovary stained with Inhibin  $\alpha$  antibody (Mob 435).

Immunogen: Synthetic peptide corresponding to the 1-32 amino terminal peptide of the  $\alpha$  subunit of human inhibin.

Isotype: IgG2a

Positive Control: Ovary

Cellular Localization: Cytoplasmic

Specificity: Inhibin is a dimeric glycoprotein hormone from the TGF- $\beta$  family made of  $\alpha$  and  $\beta$  subunits. This antibody recognizes the 32kDa  $\alpha$  subunit of human inhibin. Inhibin  $\alpha$  is expressed in a wide variety of human tissues, such as brain, prostate, adrenal, granulose cells of ovary, sertoli cells of testis and in fetoplacental unit.

Monoclonal Mouse Anti-Human

### Insulin

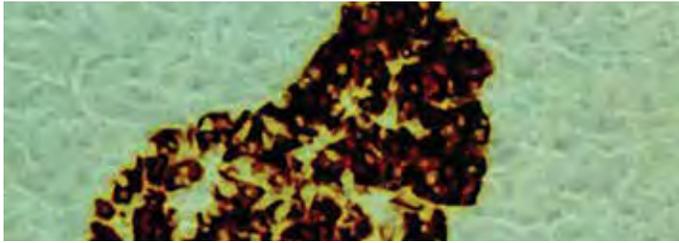
Clone: E2E3

Catalog No.: Mob 408 Concentrated 1ml

Mob 408-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded human pancreas stained with Insulin antibody (Mob 408).

Immunogen: Swine insulin.

Isotype: IgG1

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: Insulin is a hormone secreted by the  $\beta$  cells of the islets of Langerhans in the pancreas. Insulin is a 51 amino acid polypeptide composed of A and B chains connected through the C-peptide. Insulin promotes glycogen storage, formation of triglycerides and synthesis of protein and nucleic acids. Cross-reaction has been observed with insulin containing cells in fixed sections of pancreas from human.

Monoclonal Mouse Anti-Human

### Insulin

Clone: K36aC10

Catalog No.: Mob 234 Concentrated 1ml

Mob 234-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Human insulin.

Isotype: IgG1

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes purified insulin from the pancreas of human, as well as proinsulin from human.

F, P

Monoclonal Mouse Anti-Human

### Insulin-like Growth Factor-1 Receptor (IGF-1R), alpha Subunit

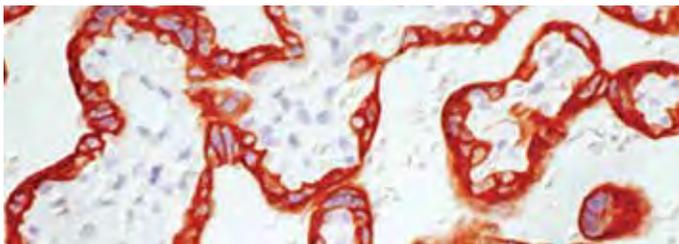
Clone: 24-31

Catalog No.: Mob 375 Concentrated 1ml

Mob 375-05 Concentrated 0.5ml

Regulatory Status: ASR

F, P/H



Formalin fixed paraffin embedded human placenta stained with IGF-1R antibody (Mob 375).

Immunogen: BALB/C mice were immunized with IGF-1R/3T3 mouse fibroblasts transfected with human type I IGF-receptor cDNA.

Isotype: IgG1

Positive Control: Breast carcinoma

Cellular Localization: Cell membrane

Specificity: This antibody stains with a 125 kDa protein. Insulin-like growth factor-1 receptor (IGF-1R) consists of  $\alpha$ - and  $\beta$ -subunits, which are disulfide-linked in a  $\beta$ - $\alpha$ - $\alpha$ - $\beta$  configuration in the mature receptor. The  $\alpha$ -subunit is completely extracellular, while  $\beta$ -subunit spans the membrane and the intracellular portion has intrinsic tyrosine kinase activity.

Monoclonal Mouse Anti-Human

### Involucrin

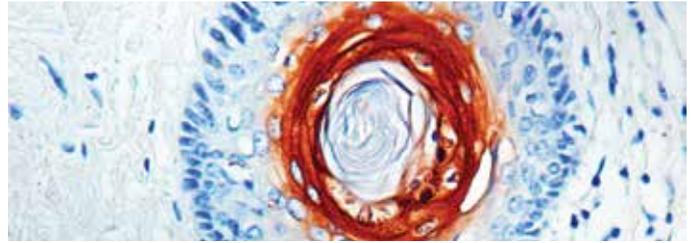
Clone: SY5

Catalog No.: Mob 270 Concentrated 1ml

Mob 270-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P/E



Formalin fixed paraffin embedded human skin stained with Involucrin antibody (Mob 270).

Immunogen: BALB/C mice were injected with human keratinocyte involucrin.

Isotype: IgG1

Positive Control: Skin

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to a 66 - 170 kDa protein, which is identified as involucrin. This antibody stains the involucrin in a variety of sizes; 170 kDa in MCF-7 cells, a doublet of ~115 kDa and 150 kDa in gorilla and monkey and a doublet of 105 kDa in pig.

Monoclonal Mouse Anti-Human

### JAK3

Clone: A1-14-16

Catalog No.: Mob 386 Concentrated 1ml

Mob 386-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were immunized with recombinant protein encoding C-terminus corresponding to amino acid 1076 -1100 of murine JAK3.

Isotype: IgG2a, kappa

Positive Control: Colon carcinoma

Cellular Localization: Cell membrane, cytoplasmic

Specificity: This antibody reacts with a protein of 115 kDa. JAK3 is a member of the Janus family of protein tyrosine kinases along with JAK1, JAK2 and Tyk2. JAK3 is activated in response to IL-3 and IL-4 in T cells and myeloid cells. JAK3 activation requires the serine-rich membrane-proximal region of the IL-2 receptor  $\beta$ -chain. Expression of JAK3 is restricted to NK and T cells.

F, P/H

Monoclonal Mouse Anti-Human

### Kappa Light Chain

Clone: KP-53

Catalog No.: Mob 075-01 Concentrated 1ml

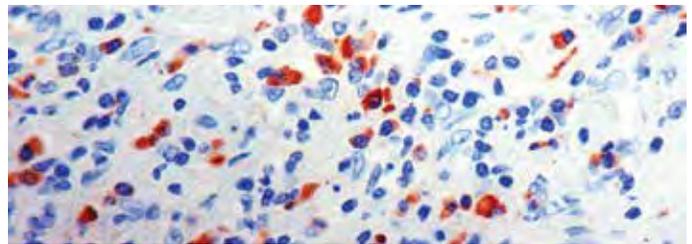
Mob 075-05 Concentrated 0.5ml

PDM 055 Prediluted 6ml

PDM055-10MM Prediluted 10ml 360

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded human tonsil stained with Kappa light chain antibody (Mob 075).

Immunogen: BALB/C mice were immunized with purified Bence Jones kappa light chain protein.

Isotype: IgG2b

Positive Control: Tonsil

Cellular Localization: Cytoplasm

Specificity: This antibody reacts with B cell follicles in human lymphoid tissues. The mantle zones give a mosaic pattern, while the germinal centers show a coarse meshwork pattern of staining. This antibody stains free as well as bound kappa light chains. This antibody does not react with human lambda light chain.

Polyclonal Rabbit Anti-Human

**Kappa Light Chain**

F, P

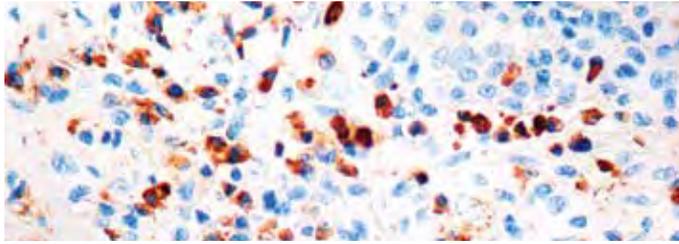
Catalog No.: RP 025 Concentrated 1ml

RP 025-05 Concentrated 0.5ml

PDR 015 Prediluted 6ml

PDR015-10RP Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Kappa light chain antibody (RP 025).

Immunogen: kappa light chains isolated from pooled urine of patients with Bence Jones proteinuria.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with free as well as bound kappa light chains. Contaminating antibodies have been removed by solid phase adsorption.

**Keratin**

See Cytokeratin

Monoclonal Mouse Anti-Human

**Ki-67**

F, P/H

Clone: MM1 (same as MB67)

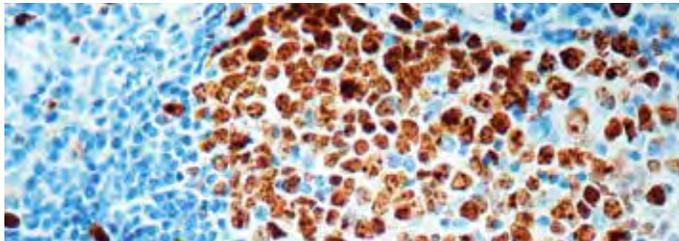
Catalog No.: Mob 237 Concentrated 1ml

Mob 237-05 Concentrated 0.5ml

PDM 026-01 Prediluted 6ml

PDM026-01-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Ki67 antibody (Mob 237).

Immunogen: Prokaryotic recombinant protein corresponding to a 1086 bp of Ki-67 motif containing cDNA fragment.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: This antibody is specific to Ki-67 nuclear antigen expressed on all proliferating cells during late G1, S, M and G2 phase of the cell cycle. Ki-67 antibody is useful in establishing the growth fraction of neoplasms by identifying Ki-67 positive cells. Among low grade lymphomas, a Ki-67 value greater than 20-25% has been shown to identify patients with a more aggressive course and among intermediate to high grade lymphomas, poorer survival has been shown with Ki-67 index exceeding 60%.

Polyclonal Rabbit Anti-Human

**Ki-67**

F, P/H

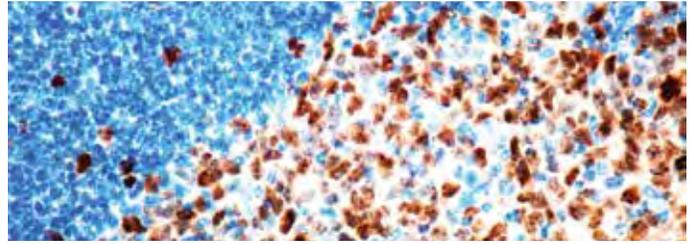
Catalog No.: RP 026 Concentrated 1ml

RP 026-05 Concentrated 0.5ml

PDR 048 Prediluted 6ml

PDR048-10RP Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Ki67 antibody (RP 026).

Immunogen: Synthetic peptide from 62 base pair region of the human Ki-67 antigen.

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: This antibody reacts with a nuclear antigen present in proliferating human cells. It can be used to evaluate the Ki-67 labeling index in various tumors.

Monoclonal Mouse Anti-Human

**Ki-67**

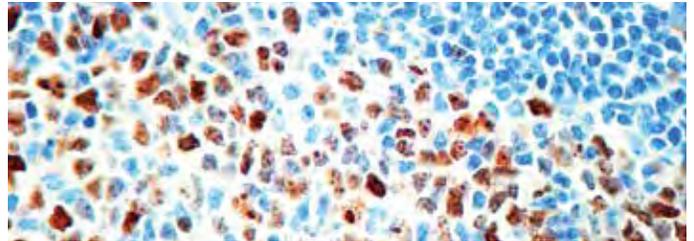
F, P/H

Clone: PP-67

Catalog No.: Mob 441 Concentrated 1ml

Mob 441-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Ki67 antibody (Mob 441).

Immunogen: A HeLa cell nuclear preparation was used as immunogen.

Isotype: IgM

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: This antibody reacts with Ki-67 antigen associated with cell proliferation and found throughout the cell cycle (G1, S, G2, M) but absent in resting cells. Anti-Ki-67 reacts with the Ki-67 nuclear antigen (345 and 395 kDa, and several lower molecular weight proteins) in immunoblotting. The product shows an immunohistochemical staining pattern similar to that obtained with other anti-Ki-67/MIB-1 reagents. This antibody is useful in the study of cell proliferation in neoplastic cell populations and with stimulated lymphocytes. It may be used in establishing the growth fraction of neoplasms.

Monoclonal Rabbit Anti-Human

### Ki-67

F, P/H

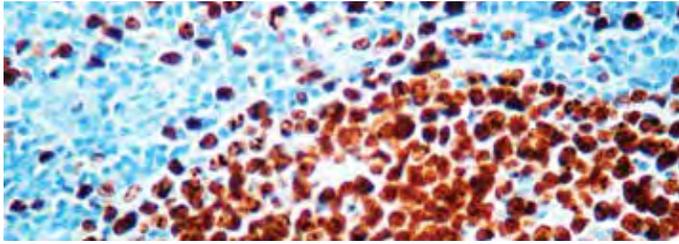
Clone: SP6

Catalog No.: RMAB 004 Concentrated 0.5ml

RMPD 004 Prediluted 6ml

RMPD004-10RM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Ki-67 antibody (RMAB 004).

Immunogen: A synthetic peptide from C-terminus of human Ki-67.

Isotype: IgG

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: Ki-67 is a nuclear protein, which is expressed in proliferating cells. Ki-67 is preferentially expressed during late G1-, S-, M-, and G2-phases of the cell cycle, while cells in the G0 (quiescent) phase are negative for this protein.

Monoclonal Mouse Anti-Human

### Ku (p70)

F, P/H

Clone: S5C11

Catalog No.: Mob 327 Concentrated 1ml

Mob 327-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with human placental extract (PSE1-PL).

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: This antibody reacts with a 70 kDa protein known as Ku (p70). Ku autoantigen is a heterodimer of 70 kDa (p70) and 80 kDa (p80) proteins. The p70/p80 dimer is important for the function of a 460 kDa DNA-dependent protein kinase that phosphorylates certain transcription factors, including sp1, Oct-1, p53 and SV40 large T antigen in vitro. Ku protein plays a role in cell signaling, proliferation, DNA repair, replication, transcriptional activation and apoptosis.

Monoclonal Mouse Anti-Human

### Lambda Light Chain

F, P/E

Clone: N10/2

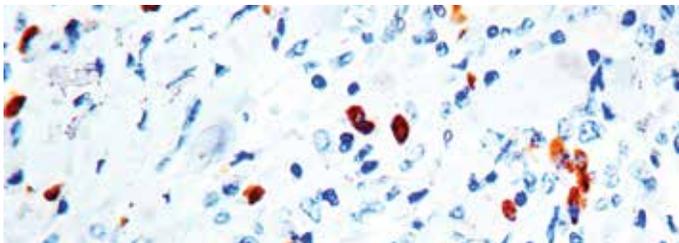
Catalog No.: Mob 077 Concentrated 1ml

Mob 077-05 Concentrated 0.5ml

PDM 056 Prediluted 6ml

PDM056-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Lambda Light Chain antibody (Mob 077).

Immunogen: BALB/C mice were immunized with purified IgG from human serum.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody does not show any cross-reactivity with kappa light chain. It stains B cell follicles in human lymphoid tissues. The mantle zone shows a mosaic pattern of labeling while the germinal centers show a coarse meshwork pattern of staining.

Monoclonal Mouse Anti-Human

### Lambda Light Chain

F, P/E

Clone: HP6054

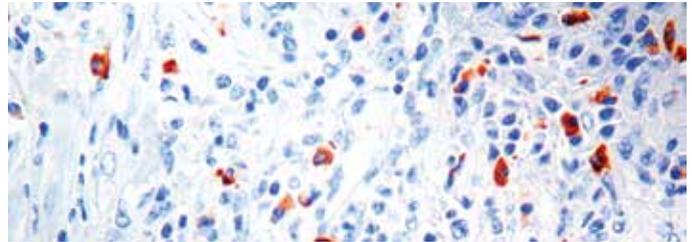
Catalog No.: Mob 201 Concentrated 1ml

Mob 201-05 Concentrated 0.5ml

PDM 114 Prediluted 6ml

PDM114-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Lambda Light Chain antibody (Mob 201).

Immunogen: BALB/C mice were injected with purified human IgG myeloma proteins covalently coupled to polyaminostyrene microbeads.

Isotype: IgG2a

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to human lambda light chain. It reacts with free and bound heavy chain isotypes. Lambda light chains are found on the surface of B cells in lymphoid tissues. This antibody is useful for the identification of immunoglobulins in leukemias, plasmacytomas and some non-Hodgkin lymphomas.

Polyclonal Rabbit Anti-Human

### Lambda Light Chain

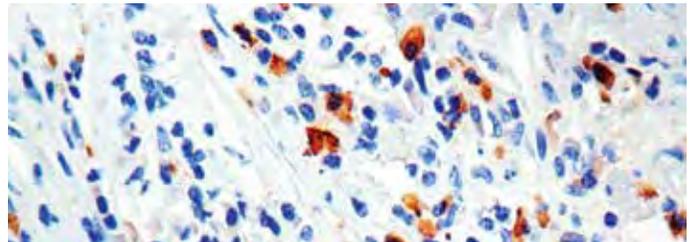
F, P/E

Catalog No.: RP 027 Concentrated 1ml

RP 027-05 Concentrated 0.5ml

PDR 016 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Lambda Light Chain antibody (RP 027).

Immunogen: Lambda light chains isolated from pooled urine of patients with Bence Jones proteinuria.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with free as well as bound lambda light chains. Contaminating antibodies have been removed by solid phase adsorption.

Monoclonal Mouse Anti-Human

**Laminin**

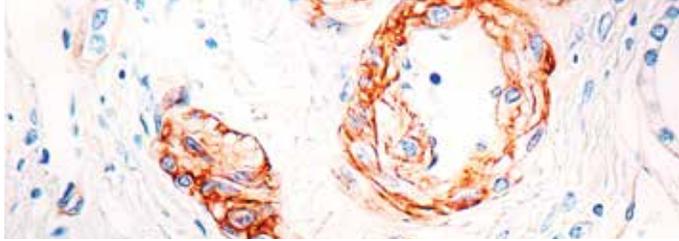
Clone: 4C7

Catalog No.: Mob 202 Concentrated 1ml

Mob 202-05 Concentrated 0.5ml

F, P/E

Regulatory Status: IVD



Formalin fixed paraffin embedded renal carcinoma stained with Laminin antibody (Mob 202).

Immunogen: The A chain of human laminin.

Isotype: IgG2a, kappa

Positive Control: Skin

Cellular Localization: Basement membrane

Specificity: This antibody reacts with the terminal globular domain of the A chain. The staining with this antibody is sensitive to fixation of paraffin tissues and use of proteolytic enzymatic treatment.

Monoclonal Mouse Anti-Human

**Leukocyte Common Antigen (LCA)/CD45**

Clone: PD7/26 + 2B11

Catalog No.: Mob 040 Concentrated 1ml

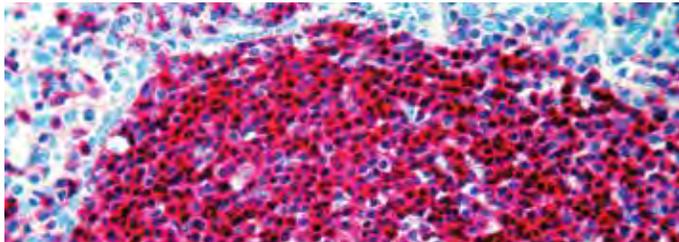
Mob 040-05 Concentrated 0.5ml

PDM 009 Prediluted 6ml

PDM009-10MM Prediluted 10ml

F, P

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Leukocyte Common Antigen (Mob 040).

Immunogen: BALB/C mice were immunized with human peripheral blood lymphocytes to raise clone PD7/26 and with isolated neoplastic cells from T cell lymphoma to raise clone 2B11.

Isotype: Both clones, IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: The human leukocyte common antigen is a family of five or more high molecular weight glycoproteins of MW 180, 190, 205 and 220 kDa, present on the surface of the majority of human leukocytes. This antibody labels lymphoid cells. It labels neoplastic B and T cells in non-Hodgkin lymphoma and in leukemias of B and T cell types.

Monoclonal Mouse Anti-Human

**Linker for Activation of T Cells (LAT)**

Clone: 3.8

Catalog No.: Mob 414 Concentrated 1ml

Mob 414-05 Concentrated 0.5ml

F, P/H

Regulatory Status: IVD

Immunogen: Prokaryotic recombinant protein corresponding to a region of 120 amino acids within the C-terminus of the LAT molecule.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Membrane

Specificity: Linker for activation of T cells (LAT) is an integral membrane protein (36 to 38 kDa), which plays an important role in linking engagement of the TCR to the biochemical events of T cell activation. LAT antibody stains thymus and peripheral lymphoid tissues such as T cell areas in lymph nodes and spleen. LAT is expressed in T lymphocytes in interstitial spaces, platelets and megakaryocytes. LAT is not expressed in B cells, macrophages, plasma cells, monocytes, epithelial histiocytes or dendritic cells.

Polyclonal Rabbit Anti-Human

**Lysozyme/Muramidase**

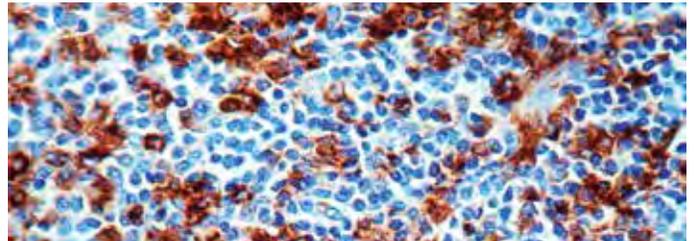
Catalog No.: RP 028 Concentrated 1ml

RP 028-05 Concentrated 0.5ml

PDR 005 Prediluted 6ml

F, P

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Lysozyme antibody (RP 028).

Immunogen: Lysozyme isolated from urine of patients with monocytic leukemia.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with lysozyme. It stains granulocytes, monocytes and macrophages in human tonsil, skin and colon. This antibody does not cross-react with any other cell types.

Monoclonal Mouse Anti-Human

**Macrophage**

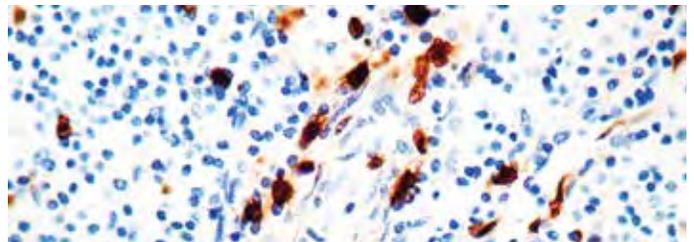
Clone: MAC387

Catalog No.: Mob 203 Concentrated 1ml

Mob 203-05 Concentrated 0.5ml

F, P/E

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Macrophage antibody (Mob 203).

Immunogen: BALB/C mice were injected with affinity purified monocyte membrane preparation.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to human leukocyte antigen L1, also known as calprotectin, calgranulin and cystic fibrosis antigen. This antibody reacts with neutrophils, monocytes, macrophages and squamous mucosal epithelia.

Monoclonal Mouse Anti-Human

**Macrophage, CD68**

Clone: EMB11

Catalog No.: Mob 046 Concentrated 1ml

Mob 046-05 Concentrated 0.5ml

F

Regulatory Status: IVD

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a 110 kDa glycoprotein expressed primarily as an intracellular molecule. It stains macrophages in a wide variety of human tissues, including Kupffer cells and macrophages in the spleen, gut, and lung alveoli and in bone marrow. Peripheral blood monocytes, large lymphocytes and basophils and mast cells are positive but neutrophils stain very weakly.

Polyclonal Rabbit Anti-Human

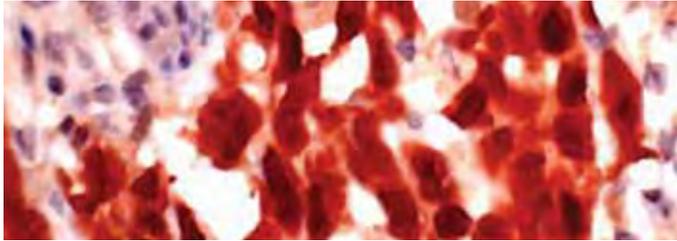
### MAGE-1

F, P/H

Catalog No.: RP 144 Concentrated 1ml

RP 144-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human melanoma stained with MAGE-1 antibody (RP 144).

Immunogen: A recombinant full length human MAGE-1 protein.

Positive Control: Melanoma

Cellular Localization: Cytoplasmic, nuclear

Specificity: Human malignant neoplasms carry rejection antigens that are recognized by the patient's autologous, tumor directed and specific, cytolytic, CD8+ T lymphocyte clones (CTL). The MAGE family of genes codes an important group of antigens. It was identified that melanomas and primary glial brain tumors express common melanoma associated antigens (MAAs). Because MAGE-1 is expressed on a significant proportion of human neoplasms of various histological types (melanoma, brain tumors of glial origin, neuroblastoma, non-small cell lung cancer, breast, gastric, colorectal, ovarian, renal cell carcinomas) and not on normal tissues, the encoded antigen may serve as a marker of early detection and target for cancer immunotherapy.

Monoclonal Mouse Anti-Human

### Major Vault Protein (MVP)/LRP

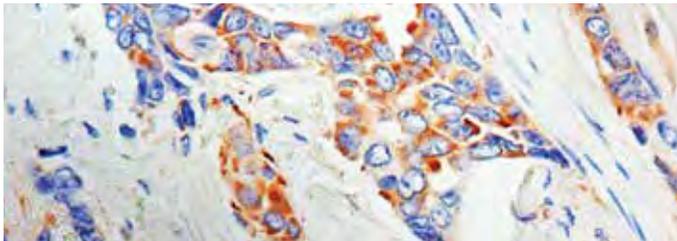
F, P/H

Clone: 1032

Catalog No.: Mob 344 Concentrated 1ml

Mob 344-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human breast carcinoma stained with MVP antibody (Mob 344).

Immunogen: BALB/C mice were injected with proteins precipitated with AER317 from the phosphocellulose column flow-through of extract of human breast cancer MCF-7 cells.

Isotype: IgG1

Positive Control: Breast

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 104 to 110 kDa protein known as major vault protein (MVP). It is identical to lung-resistance related protein (LRP). Treatment of cells with estradiol increases the amount of MVP in nuclear extract. Antibodies to progesterone and glucocorticoid receptors are also able to co-immunoprecipitate the MVP.

Polyclonal Rabbit Anti-Human

### Mammaglobin

F, P/H

Catalog No.: RP 161 Concentrated 1ml

RP 161-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Recombinant full length human mammaglobin protein.

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic

Specificity: The mammaglobin gene was first identified using a differential screening approach directed at the isolation of novel, human breast cancer-associated genes. Mammaglobin encodes a 10 kDa glycoprotein and is distantly related to a family of epithelial secretory proteins that includes rat estramustine-binding protein/prostatein and human Clara cell 10 kDa protein (CC10)/uterglobin. Mammaglobin, a mammary-specific member of the uterglobin family, is known to be overexpressed in human breast cancer. Studies suggest that mammaglobin is one of the first relatively mammary-specific and mammary-sensitive markers (85%). Mammaglobin may be valuable used in a panel with BRST-2 (GCDFP-15) and ER in evaluating tumors of unknown primary sites.

Monoclonal Mouse Anti-Human

### MART-1/Melan-A, Melanoma Marker

F, P/H

Clone: A103

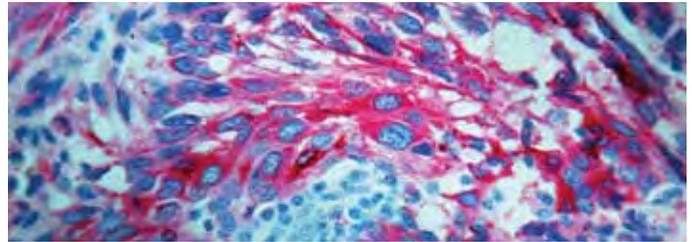
Catalog No.: Mob 277 Concentrated 1ml

Mob 277-05 Concentrated 0.5ml

PDM 153 Prediluted 6ml

PDM153-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human melanoma stained with MART-1/Melan-A antibody (Mob 277).

Immunogen: BALB/C mice were injected with recombinant MART-1 protein.

Isotype: IgG1

Positive Control: Melanoma

Cellular localization: Cytoplasmic

Specificity: This antibody is specific to a protein of 20 kDa known as MART-1 (melanoma antigen recognized by T cells-1) or Melan-A. This antibody does not cross-react with MAGE-1 or tyrosinase. MART-1 is a newly identified melanocyte differentiation antigen recognized by autologous cytotoxic T lymphocytes. This antibody stains melanomas and other tumors showing melanocytic differentiation.

Monoclonal Mouse Anti-Human

### Mast Cell Chymase

F, P/H

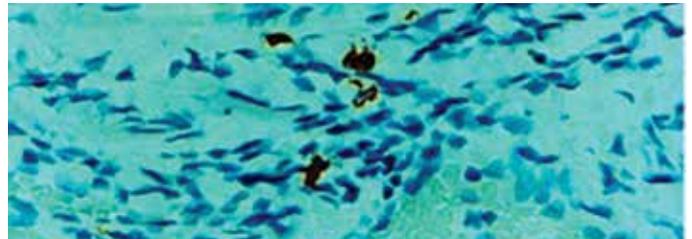
Clone: CC1

Catalog No.: Mob 346 Concentrated 1ml

Mob 346-05 Concentrated 0.5ml

PDM 159 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Mast Cell Chymase antibody (Mob 346).

Immunogen: BALB/C mice were injected with a purified human skin chymase.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with mast cells distributed in skin, synovium, lung, and heart. Mast cells contain a number of preformed chemical mediators such as histamine, chymase, carboxypeptidase, and proteolytic trypsin. Human mast cell chymase is considered to be an important marker of mast cells and is an important mediator of inflammation.

Monoclonal Mouse Anti-Human

### Mast Cell Tryptase

F, P/H

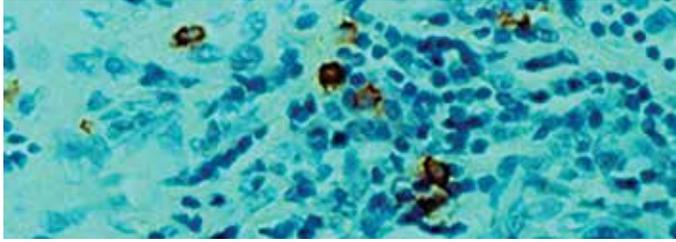
Clone: AA1

Catalog No.: Mob 347 Concentrated 1ml

Mob 347-05 Concentrated 0.5ml

PDM 160 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Mast Cell Tryptase antibody (Mob 347).

Immunogen: BALB/C mice were injected with a purified human lung tryptase.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with mast cells distributed in skin, synovium, lung, and heart. This antibody does not bind with any other cell type. Mast cells contain a number of preformed chemical mediators such as histamine, chymase, carboxypeptidase, and proteolytic tryptase. Human mast cell tryptase is considered to be an important marker of mast cell activation and is an important mediator of inflammation.

Monoclonal Mouse Anti-Human

### Melanoma

F, P/H

Clone: HMB45

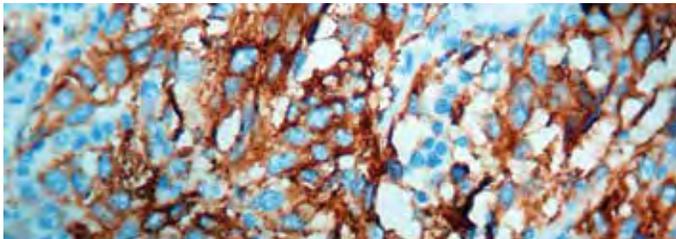
Catalog No.: Mob 079 Concentrated 1ml

Mob 079-05 Concentrated 0.5ml

PDM 011 Prediluted 6ml

PDM011-10MM Prediluted 10ml 3 G 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human melanoma stained with Melanoma antibody (Mob 079).

Immunogen: BALB/C mice were injected with extract of pigmented melanoma metastases from lymph nodes.

Isotype: IgG1, kappa

Positive Control: Melanoma

Cellular Localization: Cytoplasm

Specificity: This antibody reacts with a neuraminidase sensitive oligosaccharide side chain of a glycoconjugate present in immature melanosomes. It reacts with junctional and blue nevus cells. Non-melanocytic cells are negative.

Monoclonal Mouse Anti-Human

### Melanoma

F, P/H

Clone: PNL2

Catalog No.: Mob 421 Concentrated 1ml

Mob 421-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Synthetic peptide.

Isotype: IgG1

Positive Control: Melanoma

Cellular Localization: Cytoplasmic, membrane

Specificity: This antibody labels melanocytes and is a useful tool for the identification of melanomas and clear cell sarcomas. Anti-Melanoma, PNL2, seems to be a melanocyte antibody of autoimmune origin as it does not react with the non-melanocytic peptide antigen used for immunization.

Monoclonal Mouse Anti-Human

### Melanoma Cocktail

F, P/H

Clone: HMB45+A103+T311

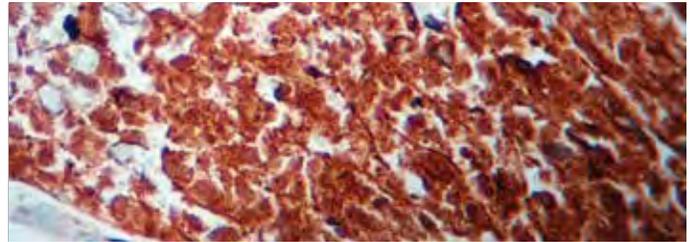
Catalog No.: Mob 428 Concentrated 1ml

Mob 428-05 Concentrated 0.5ml

PDM 146 Prediluted 6ml

PDM146-10MM Prediluted 10ml 3 G 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human melanoma stained with Melanoma cocktail (PDM 146).

Immunogen: Pigmented melanoma metastases from lymph nodes (HMB45). Recombinant human MART-1 protein (A103). Recombinant tyrosinase protein T311.

Isotype: HMB45 and A103, IgG1; T311, IgG2a

Positive Control: Metastatic melanoma in lymph node

Cellular Localization: Cytoplasmic

Specificity: The HMB45 clone reacts with a neuraminidase-sensitive oligosaccharide side chain of a glycoconjugate present in immature melanosomes. The HMB45-reactive antigen is present in cutaneous melanocytes, prenatal and infantile retinal pigment epithelium and melanoma cells and is thought to be oncofetal in nature. This antibody has been shown to label the majority of melanomas. Clone A103 recognizes a protein of 20 kDa, identified as MART-1 (melanoma antigen recognized by T cells-1) or Melan-A. Melan-A is a useful addition to melanoma panels as it is apparently specific for melanocytic lesions. Studies have also shown that MART-1 is more sensitive than HMB45 when labeling metastatic melanomas. Tyrosinase is a key enzyme involved in the initial stages of melanin biosynthesis. Studies have shown tyrosinase to be a more sensitive marker when compared to HMB45 and MART-1. It has been shown to label a higher percentage of desmoplastic melanomas than HMB45. The combination of HMB45, MART-1 and tyrosinase make this triple antibody cocktail a first-order pan melanoma screener.

Monoclonal Mouse Anti-Human

### Mesothelioma

F, P/H

Clone: HBME-1

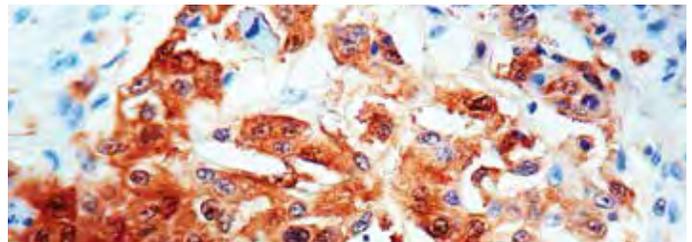
Catalog No.: Mob 349 Concentrated 1ml

Mob 349-05 Concentrated 0.5ml

PDM 134 Prediluted 6ml

PDM134-10MM Prediluted 10ml 3 G 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human mesothelioma stained with Mesothelioma antibody (Mob 349).

Immunogen: BALB/C mice were injected with suspension of human mesothelioma cells from patients with malignant epithelial mesothelioma.

Isotype: IgM

Positive Control: Mesothelioma

Cellular Localization: Cell membrane

Specificity: This antibody reacts with an unknown antigen on microvilli of mesothelioma cells. It stains normal mesothelial cells as well as epithelial mesotheliomas in a thick membrane pattern due to abundant lung microvilli on the surface of these cells.

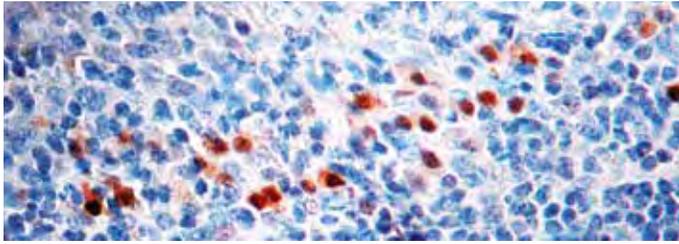
Monoclonal Mouse Anti-Human

### O(6)-Methylguanine-DNA-Methyltransferase (MGMT) F, P/H

Clone: MT3.1

Catalog No.: Mob 423 Concentrated 1ml  
Mob 423-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with MGMT antibody (Mob 423).

Immunogen: Recombinant human MGMT protein.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Nuclear and cytoplasmic

Specificity: O(6)-methylguanine-DNA-methyltransferase (MGMT) is a 22 kDa human DNA repair protein that removes O(6)-alkylguanine DNA adducts. MGMT acts as a suicide acceptor protein repairing the DNA by accepting alkyl groups and consequently inactivating itself. This antibody stains all mantle zone lymphocytes and 50% of germinal center lymphocytes. Basaloid epithelial cells of tonsil squamous mucosa are also stained positive with this antibody.

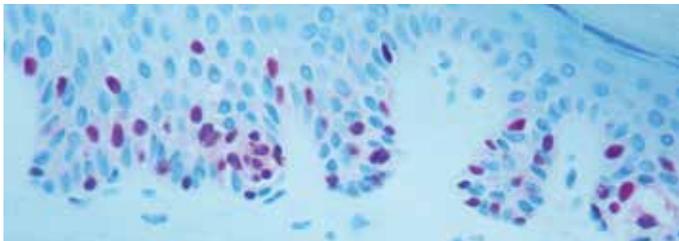
Monoclonal Mouse Anti-Human

### Microphthalmia Transcription Factor (MITF) F, P/H

Clone: D5

Catalog No.: Mob 462 Concentrated 1ml  
Mob 462-05 Concentrated 0.5ml  
PDM 168 Prediluted 6ml  
PDM168-10MM Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with MITF antibody (Mob 462).

Immunogen: BALB/C mice were injected with N-terminal fragment of human Mi protein.

Isotype: IgG1

Positive Control: Melanoma

Cellular Localization: Nuclear

Specificity: This antibody reacts with a 52-56 kDa protein known as microphthalmia (Mi). This antibody reacts with both melanocytic and non-melanocytic isoforms of Mi. Mi is a basic helix-loop-helix-leucine zipper (b-HLH-ZIP) transcription factor implicated in pigmentation, mast cells and bone development. There are two known isoforms of Mi differing by 66 amino acids at the amino terminus.

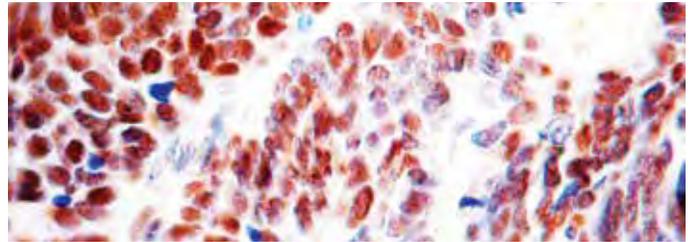
Monoclonal Mouse Anti-Human

### MLH-1 F, P/H

Clone: G168-15

Catalog No.: Mob 430 Concentrated 1ml  
Mob 430-05 Concentrated 0.5ml  
PDM 148 Prediluted 6ml  
PDM148-10MM Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon carcinoma stained with MLH-1 antibody (Mob 430).

Immunogen: Full length recombinant MLH1.

Isotype: IgG1

Positive Control: Tonsil, colon carcinoma

Cellular Localization: Nuclear

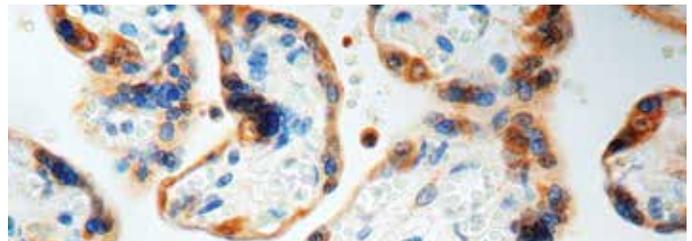
Specificity: The G168-15 antibody recognizes human and mouse MLH1 (80-85kDa). The repair of mismatch DNA is essential to maintaining the integrity of genetic information over time. An alteration of microsatellite repeats is the result of slippage owing to strand misalignment during DNA replication and is referred to as microsatellite instability (MSI). These defects in DNA repair pathways have been related to human carcinogenesis. The importance of mismatch repair genes became apparent with the identification of the genetic basis for hereditary nonpolyposis colon cancer (HNPCC). MSH-2 is involved in the initial cognition of mismatch nucleotides during the replication mismatch repair process. It is thought that after MSH2 binds to a mismatched DNA duplex it is joined by a heterodimer of MLH1 and PMSH, which together help facilitate the later steps in mismatch repair.

Polyclonal Rabbit Anti-Human

### MMP-1/Collagenase-1 F, P/H

Catalog No.: RP 089 Concentrated 1ml  
RP 089-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human placenta stained with MMP-1 antibody (RP 089).

Immunogen: A synthetic peptide from the middle region of the human MMP-1.

Positive Control: Placenta

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 52 kDa protein (unglycosylated) and 57 kDa (glycosylated) species of the pro form of MMP-1 as well as 42 kDa (unglycosylated) and 47 kDa (glycosylated) active form of MMP-1. Matrix metalloproteinases (MMPs) are a family of closely related zinc-containing proteolytic enzymes, capable of degrading connective tissue components. MMP-1 appears to be associated with facilitating the tumor spread and invasion of esophageal and colorectal cancers and is associated with poor prognosis. Interstitial collagenase (MMP-1), 73 kDa gelatinase A/type IV collagenase (MMP-2) and 92 kDa gelatinase B/type IV collagenase (MMP-9) dissolve extracellular matrix and may initiate and promote angiogenesis.

Monoclonal Mouse Anti-Human

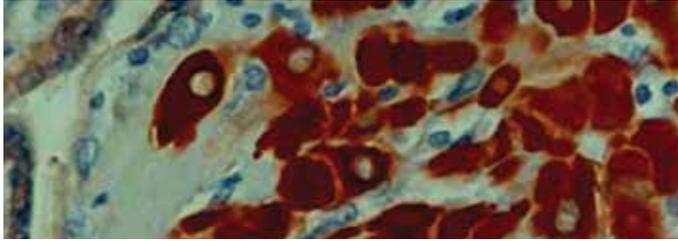
### MMP-2

F, P

Clone: A-Gel VC2

Catalog No.: Mob 312 Concentrated 1ml  
Mob 312-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human placenta stained with MMP-2 antibody (Mob 312).

Immunogen: BALB/C mice were injected with human APMA activated native 72 kDa MMP-2 protein.

Isotype: IgG1

Positive Control: Placenta

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 72 kDa, pro form as well as 66 kDa active form of MMP-2. MMPs are proteolytic enzymes capable of degrading connective tissue components. MMPs and TIMPs play a significant role in regulation of angiogenesis.

Polyclonal Rabbit Anti-Human

### MMP-7/Matrilysin

F, P

Catalog No.: RP 090 Concentrated 1ml  
RP 090-05 Concentrated 0.5ml

Regulatory Status: RUO

Immunogen: A synthetic peptide from the human matrilysin (PUMP-1).

Positive Control: Placenta

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 28 kDa protein (pro form) and 18 kDa (active form) of MMP-7. Matrix metalloproteinases (MMPs) are a family of closely related zinc-containing proteolytic enzymes, capable of degrading connective tissue components. Imbalanced secretion of certain MMP is implicated in the invasive potential of malignant tumors. MMP-7 is thought to play an important role in the early steps of tumor progression. Expression of MMP-2, MMP-7 and MMP-11 is higher in pancreatic carcinoma than in normal pancreas.

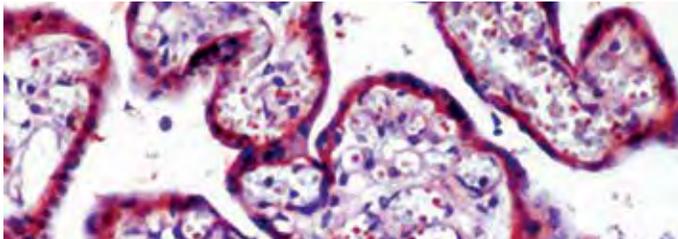
Polyclonal Rabbit Anti-Human

### MMP-9

F, P/H

Catalog No.: RP 066 Concentrated 1ml  
RP 066-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human breast carcinoma stained with MMP-9 antibody (RP 066).

Immunogen: A synthetic peptide from the middle region of human MMP-9.

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 92 kDa pro form and 86 kDa active form of MMP-9. MMPs are proteolytic enzymes capable of degrading connective tissue components. MMPs play a crucial role in tumor cell invasion and metastasis.

Monoclonal Mouse Anti-Human

### MMP-11/Stromelysin-3

F, P

Clone: SL3.05

Catalog No.: Mob 393 Concentrated 1ml  
Mob 393-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were immunized with a recombinant protein corresponding to active form of human MMP-11

Isotype: IgG1, kappa

Positive Control: Placenta

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes a protein of 60 kDa (latent), 47 kDa (active) and 35 kDa (degradation product). Matrix metalloproteinase (MMPs) are a family of closely related zinc-containing proteolytic enzymes, capable of degrading connective tissue components. MMP-11 is localized on the long arm of chromosome 22. MMP-11 gene was originally identified on the basis that it is expressed specifically in stromal cells surrounding invasive breast carcinomas. MMP-11 expression is found more specifically in malignant tumors than in benign ones.

Polyclonal Rabbit Anti-Human

### MMP-14/MT1-MMP

F, P

Catalog No.: RP 085 Concentrated 1ml  
RP 085-05 Concentrated 0.5ml

Regulatory Status: RUO

Immunogen: A synthetic peptide from the second quarter of human MMP-14/MT1-MMP.

Positive Control: Placenta

Cellular Localization: Cytoplasmic, cell membrane

Specificity: This antibody reacts with 66 kDa (latent) and 54 kDa (active) proteins. MMPs are a group of enzymes involved in matrix degradation. Of the sixteen members of matrix metalloproteinase family, ten exist in soluble form whereas MT-MMPs exist as integral membrane proteins. MT1-MMP, MT2-MMP and MT3-MMP are also known as MMP14, MMP15 and MMP16 respectively. They contain a C-terminal transmembrane domain anchoring them to the cell surface. MT1-MMP cleaves progelatinase A (MMP-2) and progelatinase B to their active forms. MT1-MMP gets activated through the membrane plasmin cascade. It binds to TIMP-2 first and then to MMP-2 forming a trimer. It cleaves the pro-MMP-2 to its active form.

Polyclonal Rabbit Anti-Human

### MMP-15/MT2-MMP

F, P

Catalog No.: RP 086 Concentrated 1ml  
RP 086-05 Concentrated 0.5ml

Regulatory Status: RUO

Immunogen: A synthetic peptide from the second quarter of human MMP-15/MT2-MMP.

Positive Control: Placenta

Cellular Localization: Cytoplasmic, cell membrane

Specificity: This antibody reacts with 66 kDa (latent) and 54 kDa (active) proteins. MMPs are a group of enzymes involved in matrix degradation. Of the sixteen members of matrix metalloproteinase family, ten exist in soluble form whereas MT-MMPs exist as integral membrane proteins. MT1-MMP, MT2-MMP and MT3-MMP also known as MMP14, MMP15 and MMP16 respectively. They contain a C-terminal transmembrane domain anchoring them to the cell surface. MT2-MMP plays a minor role in activation of pro-MMP2 to its active form in breast carcinomas. Coexpression of MT1-MMP and MT2-MMP in advanced stages of breast carcinomas is indicative of possible involvement of MT2-MMP in its metastasis.

Monoclonal Mouse Anti-Human

### Mismatch Repair Protein 2 (MSH2) F, P/H

Clone: 25D12

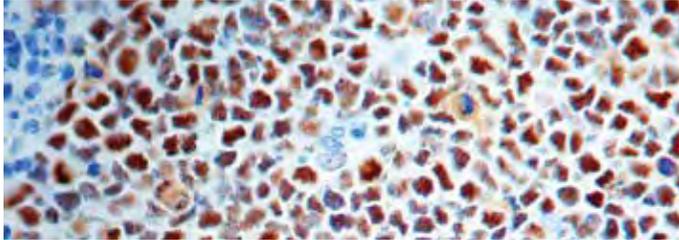
Catalog No.: Mob 332 Concentrated 1ml

Mob 332-05 Concentrated 0.5ml

PDM 179 Prediluted 6ml

PDM179-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with MSH2 antibody (Mob 332).

Immunogen: BALB/C mice were injected with recombinant human MSH2 protein.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: This antibody reacts with a 102 kDa protein known as MSH2 (mismatch repair protein 2). MSH2 protein is involved in the initial recognition of mismatched nucleotides during the post replication mismatch repair process. Loss of MSH2 function leads to the accumulation of replication errors, which in turn may be responsible for the multiple mutations required for multistage carcinogenesis.

Monoclonal Mouse Anti-Human

### MSH6 F, P/H

Clone: 44

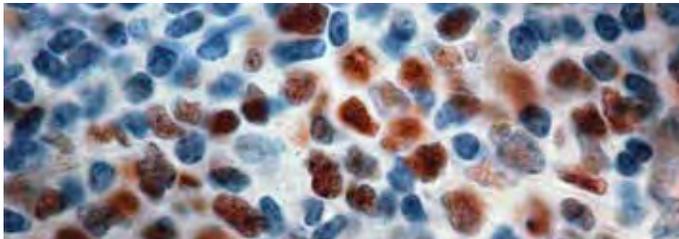
Catalog No.: Mob 429 Concentrated 1ml

Mob 429-05 Concentrated 0.5ml

PDM 147 Prediluted 6ml

PDM147-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with MSH6 antibody (PDM 147).

Immunogen: Human MSH6.

Isotype: IgG1

Positive Control: Tonsil, colon carcinoma

Cellular Localization: Nuclear

Specificity: MSH6 is a heterodimer of MSH2 and binds to DNA containing G/T mismatches. The MSH2-MSH6 complex recognizes a single-base mispair insertion/deletion loop. An alteration of microsatellite repeats is the result of slippage owing to strand misalignment during DNA replication and is referred to as microsatellite instability (MSI). These defects in DNA repair pathways have been related to human carcinogenesis. Studies have shown the mutations of MLH-1, MSH2 and MSH6 genes contribute to the development of sporadic colorectal carcinoma. The repair of mismatch DNA is essential to maintaining the integrity of genetic information over time.

Monoclonal Mouse Anti-Human

### Mucin 5AC/Gastric Mucin F, P

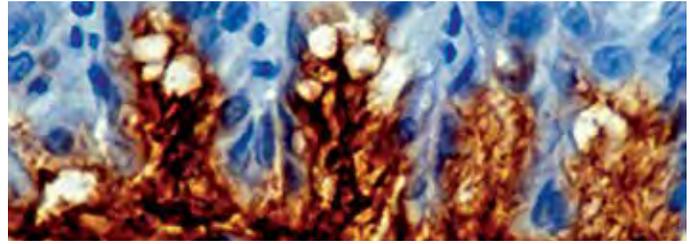
Clone: 45M1

Catalog No.: Mob 357 Concentrated 1ml

Mob 357-05 Concentrated 0.5ml

PDM 163 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human stomach stained with Mucin 5AC antibody (Mob 357).

Immunogen: BALB/C mice were injected with M1 mucin preparation from the fluid of an ovarian mucinous cyst belonging to an O Le (a-b) patient.

Isotype: IgG1, kappa

Positive Control: Stomach

Cellular Localization: Cytoplasmic, cell surface

Specificity: This antibody reacts with a 1000 kDa protein and recognizes the peptide core of gastric mucin M1. Mucins are high molecular weight glycoproteins with 80% carbohydrates and 20% core protein. Gastric mucin M1 antigen is found in columnar mucus cells of surface gastric epithelium and in goblet cells of the fetal and precancerous colon but not in normal colon. Resurgence of gastric mucin during colonic carcinogenesis is suggestive of either re-expression of the peptide core of gastric mucin in the adult colon or changes in the glycosylation pattern of mucin, which expose the hidden M1 antigen.

Monoclonal Mouse Anti-Human

### MUM1 Protein F, P/H

Clone: MUM1p

Catalog No.: Mob 420 Concentrated 1ml

Mob 420-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Recombinant GST-MUM1 protein.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Nuclear and cytoplasmic

Specificity: Multiple myeloma oncogene-1 (MUM1) is a 50kDa protein encoded by the MUM1 gene. This antibody stains MUM1 protein, which is expressed in a subset of B cells in the light zone of the germinal center, plasma cells, activated T cells and a wide spectrum of related hematolymphoid neoplasms. This antibody is useful in the sub classification of lymphoid malignancies.

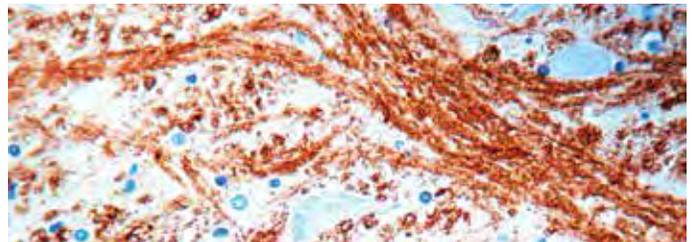
Polyclonal Rabbit Anti-Human

### Myelin Basic Protein (MBP) F, P

Catalog No.: RP 052 Concentrated 1ml

RP 052-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin brain medulla stained with Myelin Basic Protein antibody (RP052).

Immunogen: Human myelin basic protein isolated from normal human brain.

Positive Control: Brain

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with human myelin basic protein and oligodendrocytes of white matter in brain and spinal cord. Grey matter stains weakly. This antibody stains peripheral nerves also.

Monoclonal Mouse Anti-Human

**Myeloid Marker (BM2)**

F, P

Clone: BM2

Catalog No.: PDM 084 Prediluted 6ml

Regulatory Status: IVD

Immunogen: Nuclei from pokeweed mitogen stimulated human peripheral lymphocytes.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with an antigen present in the cytoplasm of mature human granulocytes. It reacts with the precursor and mature forms of human myeloid cells. This antibody can be used to detect myeloid leukemias and granulocytic sarcomas as well as different levels of cellular differentiation.

Monoclonal Mouse Anti-Human

**Myeloperoxidase**

P/H

Clone: 59A5

Catalog No.: Mob 206-1 Concentrated 1ml

Mob 206-1-05 Concentrated 0.5ml

PDM 109-1 Prediluted 6ml

PDM109-1-10MM Prediluted 10ml 360

Regulatory Status: IVD

Immunogen: Recombinant protein from exon 7 of the human myeloperoxidase.

Isotype: IgG2b, kappa

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: Myeloperoxidase metabolizes most of the hydrogen peroxide generated by activated phagocytes. This antibody stains strongly with the cytoplasm of myeloid cells. The antibody detects myeloperoxidase found in myeloid cells of acute myeloid leukemia. The myeloperoxidase gene has been localized to chromosome 17.

Polyclonal Rabbit Anti-Human

**Myeloperoxidase**

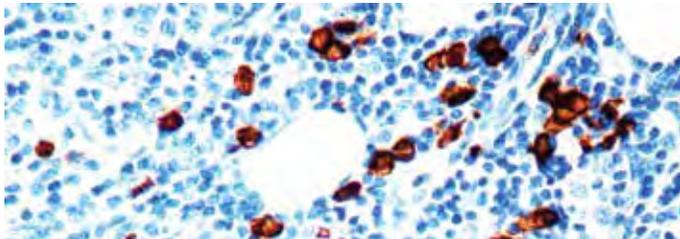
F, P/H

Catalog No.: RP 053 Concentrated 1ml

RP 053-05 Concentrated 0.5ml

PDR 049 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded B-Cell Lymphoma stained with Myeloperoxidase antibody (RP 053).

Immunogen: Myeloperoxidase isolated from human granulocytes.

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with human myeloperoxidase. It stains granules of neutrophils, granulocytes in spleen, bone marrow, tonsil and blood smears.

Monoclonal Mouse Anti-Human

**MyoD1**

F, P/H

Clone: 5.8A

Catalog No.: Mob 278-1 Concentrated 1ml

Mob 278-1-05 Concentrated 0.5ml

PDM 120-1 Prediluted 6ml

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with a recombinant mouse MyoD1 protein.

Isotype: IgG1

Positive Control: Rhabdomyosarcoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to a 45 kDa protein, which is identified as MyoD1. MyoD1 is a nuclear phosphoprotein. This antibody stains the nuclei of myoblasts in developing muscle tissues. MyoD1 is not detected in normal adult tissue but is expressed strongly in a portion of the tumor cell nuclei of poorly differentiated rhabdomyosarcomas. Cytoplasmic staining has been reported in multinucleated cells.

Monoclonal Mouse Anti-Human

**MyoD1**

F, P/H

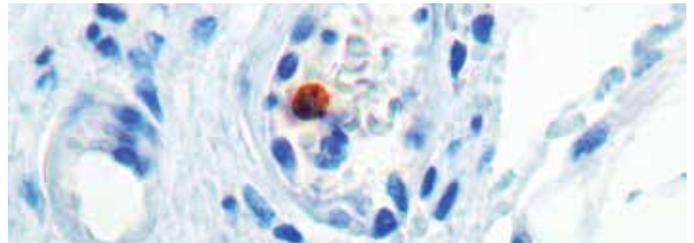
Clone: 5.2F

Catalog No.: Mob 278 Concentrated 1ml

Mob 278-05 Concentrated 0.5ml

PDM 120 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded rhabdomyosarcoma stained with MyoD1 antibody (Mob 278).

Immunogen: BALB/C mice were injected with a recombinant mouse MyoD1 protein.

Isotype: IgG2a

Positive Control: Rhabdomyosarcoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to a 45 kDa protein, which is identified as MyoD1. This antibody is specific to an epitope of amino acid 3-56 in the N-terminus of mouse MyoD1. This antibody does not react with myogenin, Myf5 or Myf6. MyoD1 stains the nuclei of myoblasts in developing muscle tissues. MyoD1 is not detected in normal adult tissue but is expressed strongly in the tumor cell nuclei of rhabdomyosarcomas.

Monoclonal Mouse Anti-Human

**Myogenin**

F, P/H

Clone: F5D

Catalog No.: Mob 322 Concentrated 1ml

Mob 322-05 Concentrated 0.5ml

PDM 158 Prediluted 6ml

PDM158-10MM Prediluted 10ml 360

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with recombinant protein containing rat myogenin amino acid 30-224.

Isotype: IgG1

Positive Control: Rhabdomyosarcoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to 34 kDa protein known as myogenin. Myogenin is a member of family of myogenic regulatory genes which includes MyoD, myf5 and MRF4. These genes encode a set of transcription factors which are essential for muscle development. Expression of myogenin is restricted to cells of skeletal muscle origin.

Polyclonal Antibody to Human

**Myoglobin**

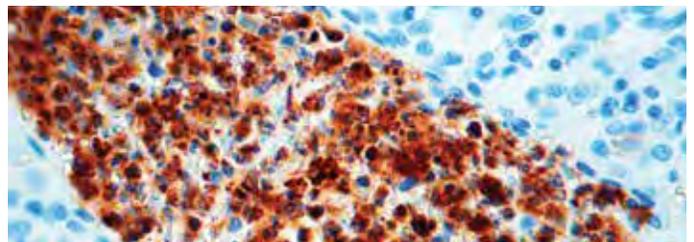
F, P/H

Catalog No.: RP 029 Concentrated 1ml

RP 029-05 Concentrated 0.5ml

PDR 011 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human skeletal muscle stained with Myoglobin antibody (RP029).

Immunogen: Myoglobin isolated from human heart.

Positive Control: Skeletal muscle

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with human myoglobin. The antibody stains strongly with skeletal and cardiac muscles. Non-specific staining with other tissues has not been observed.

Monoclonal Mouse Anti-Human

### Myosin, Skeletal (Fast)

Clone: MY32

Catalog No.: Mob 207 Concentrated 1ml

Mob 207-05 Concentrated 0.5ml

PDM 085 Prediluted 6ml

PDM085-10MM Prediluted 10ml **3 6 0**

F, P

Regulatory Status: IVD



Formalin fixed paraffin embedded human skeletal muscle stained with Myosin antibody (Mob 207).

Immunogen: Rabbit muscle myosin.

Isotype: IgG1

Positive Control: Skeletal muscle

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes heavy chain of human skeletal myosin. It does not stain cardiac or smooth muscle myosin. This antibody stains the fast twitch (type II) isomyosin molecule.

Monoclonal Mouse Anti-Human

### Napsin A

Clone: KCG1.1

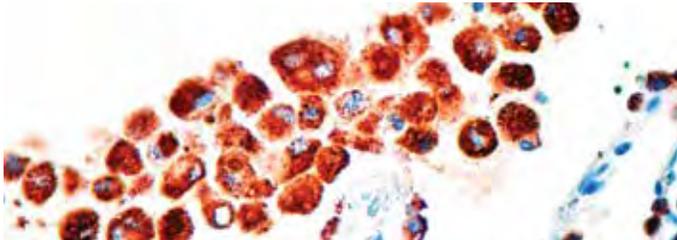
Catalog No.: Mob 463 Concentrated 1ml

Mob 463-05 Concentrated 0.5ml

PDM 154 Prediluted 6ml

F, P

Regulatory Status: IVD



Formalin fixed paraffin embedded Lung adenocarcinoma stained with Napsin A (PDM154).

Immunogen: BALB/C mice were injected with synthetic peptide from N terminus of human napsin A

Isotype: IgG1

Positive Control: Lung adenocarcinoma

Cellular Localization: Napsin is found in two isoforms, A and B, with highly homologous gene sequences. Napsin A has a molecular weight of 35.0 kDa and is also known as TA02. Napsin A is an aspartic proteinase which is expressed in the lung and involved in processing surfactant protein B (SP-B). It is also expressed in the kidney. This antibody may be a useful tool as a tumor marker for primary lung adenocarcinoma. Napsin expression correlates with the differentiation grade of lung adenocarcinoma.

Monoclonal Mouse Anti-Human

### Neurofilaments

Clone: 2F11

Catalog No.: Mob 080 Concentrated 1ml

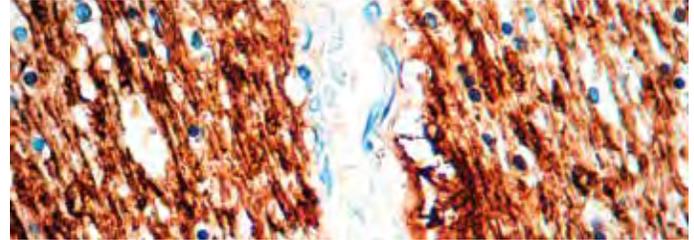
Mob 080-05 Concentrated 0.5ml

PDM 012 Prediluted 6ml

PDM012-10MM Prediluted 10ml **3 6 0**

F, P

Regulatory Status: IVD



Formalin fixed paraffin embedded human brain stained with Neurofilaments antibody (PDM012).

Immunogen: BALB/C mice were injected with purified neurofilaments from human brain.

Isotype: IgG1, kappa

Positive Control: Brain

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with 70 and 200 kDa component of the neurofilament polypeptide subunit. It stains neurons, neuronal processes and peripheral nerves. This antibody reacts with some neuroblastomas and gangliomas but not with other non-neuronal tumors.

Monoclonal Mouse Anti-Human

### Neurofilaments 200 kDa

Clone: RT97

Catalog No.: Mob 210 Concentrated 1ml

Mob 210-05 Concentrated 0.5ml

F, P

Regulatory Status: IVD

Immunogen: Triton X-100 insoluble rat brain protein.

Isotype: IgG1

Positive Control: Brain

Cellular Localization: Cytoplasmic

Specificity: This antibody stains strongly with human neurofilaments of 200 kDa. It stains neuromas, gangliomas, neuroblastomas and medulloblastomas. It also stains neuronal processes in brain and other nervous tissues. This antibody is useful for detecting paragangliomas, pheochromocytomas and other tumors of neuroectodermal origin.

Monoclonal Mouse Anti-Human

### Neuron Specific Enolase (NSE)

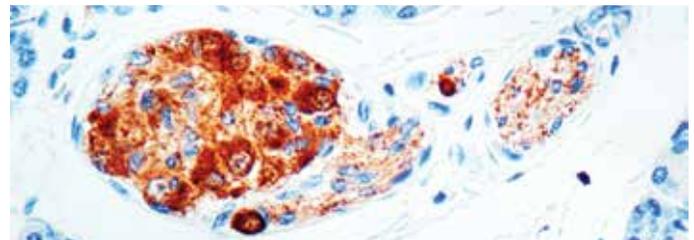
Clone: VI-H14

Catalog No.: Mob 212 Concentrated 1ml

Mob 212-05 Concentrated 0.5ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human pancreas stained with NSE antibody (Mob 212).

Immunogen: BALB/C mice were injected with  $\gamma$ - $\gamma$  enolase from human brain.

Isotype: IgG1

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to  $\gamma$ - $\gamma$  enolase isozyme of 46 kDa. This antibody stains neurons, neuroendocrine cells, gangliomas, oat cell carcinomas, astrocytomas, paragangliomas, glioblastomas, pheochromocytomas, melanomas and schwannomas.

Polyclonal Rabbit Anti-Human

### Neuron Specific Enolase, Bovine (NSE) F, P

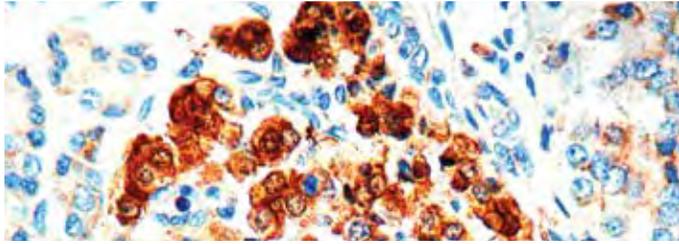
Catalog No.: [RP 054 Concentrated 1ml](#)

[RP 054-05 Concentrated 0.5ml](#)

[PDR 006 Prediluted 6ml](#)

[PDR006-10RP Prediluted 10ml](#) 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human pancreas stained with NSE antibody (RP054).

Immunogen: Neuron specific enolase ( $\gamma$ - $\gamma$  isoenzyme) isolated from bovine brain.

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with human isoenzymes of neuron specific enolase containing  $\gamma$  subunits. This antibody gives a specific staining in neurons of the brain, in islets of Langerhans in pancreas and in peripheral nerves of the skin. No staining with other tissue types has been seen.

Polyclonal Rabbit Anti-Human

### NF Kappa B p65 F, P, H

Catalog No.: [RP 127 Concentrated 1ml](#)

[RP 127-05 Concentrated 0.5ml](#)

Regulatory Status: RUO

Immunogen: A synthetic peptide corresponding to internal domain of human NF $\kappa$ B p65.

Positive Control: Prostate, placenta

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 65 kDa protein. NF kappa B is a heterodimer of a 50 kDa DNA binding subunit and a 65 kDa transactivating subunit (RelA). The p50/p65 heterodimer is present in the cytoplasm in inactive form bound to its inhibitor, I $\kappa$ B. In unstimulated cells, nuclear localization signals present on p65 are masked by members of the I $\kappa$ B family of inhibitory proteins. Subsequent to cell stimulation, I $\kappa$ B undergoes phosphorylation, allowing nuclear translocation of the active dimeric NF $\kappa$ B transcription factor.

Monoclonal Mouse Anti-Human

### OCT-4 F, P, H

Clone: [NRG1.1](#)

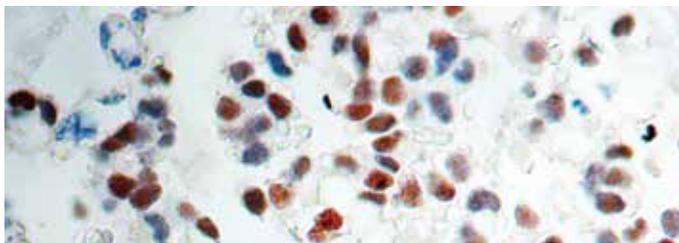
Catalog No.: [Mob 464 Concentrated 1ml](#)

[Mob 464-05 Concentrated 0.5ml](#)

[PDM 155 Prediluted 6ml](#)

[PDM155-10MM Prediluted 10ml](#) 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded Testis Seminoma stained with OCT4 antibody (Mob 464).

Immunogen: BALB/C mice injected with synthetic peptide of human OCT-4 origin.

Isotype: IgG2b

Positive Control: Seminoma

Cellular Localization: Nuclear

Specificity: OCT-4 (also known as POU5F1) is a transcription factor that has been recognized as fundamental in the maintenance of pluripotency in embryonic stem cells and primordial germ cells. It has been proposed as a useful marker for germ cell tumors (GCT) that exhibit features of pluripotentiality (seminoma/dysgerminoma, germinoma and embryonal carcinoma). OCT-4 immunostaining has been shown to be sensitive and specific for GCT, whether in primary gonadal or extragonadal sites or in metastatic lesions.

Monoclonal Mouse Anti-Human

### P14ARF Protein F, P, H

Clone: [DCS-240](#)

Catalog No.: [Mob 456 Concentrated 1ml](#)

[Mob 456-05 Concentrated 0.5ml](#)

Regulatory Status: IVD

Immunogen: Purified recombinant prokaryotic full length human p14ARF protein.

Isotype: IgG1

Positive Control: Cervical carcinoma

Cellular Localization: Nuclear

Specificity: The INK4a-ARF locus encodes two unrelated proteins both of which function in tumor suppression. p14ARF arrests the cell cycle in a p53-dependent manner. p14ARF binds to mdm2 and promotes the rapid degradation of mdm2 protein, required for mdm2 modification and concurrent p53 stabilization and accumulation. This interaction is mediated by the exon 1 $\beta$ -encoded N-terminal domain of p14ARF and a C-terminal region of mdm2. Deletion of the ARF-INK4a locus simultaneously impairs both the INK4a-cyclin D/cdk4-RB and the ARF-mdm2-p53 pathways.

Monoclonal Mouse Anti-Human

### p18INK4c F, P, H

Clone: [DCS-118](#)

Catalog No.: [Mob 454 Concentrated 1ml](#)

[Mob 454-05 Concentrated 0.5ml](#)

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with recombinant human p18INK4c protein.

Isotype: IgG2a

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to a human p18INK4c. The product does not show cross-reaction with the closely related CDK inhibitors, such as p15INK4b, p16INK4a and p19INK4d. The four known 15- to 19 kDa INK4 proteins (p15INK4b, p16INK4a, p18INK4c and p19INK4d) bind and inhibit cdk4 and cdk6 but not other CDKs. p18INK4c is expressed during G1 to S transition in the eukaryotic cell division cycle. It is maximally induced as cells enter S-phase.

Monoclonal Mouse Anti-Human

### p19INK4d F, P, H

Clone: [DCS-100](#)

Catalog No.: [Mob 453 Concentrated 1ml](#)

[Mob 453-05 Concentrated 0.5ml](#)

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with recombinant human p19INK4d protein.

Isotype: IgG1

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to a human p19INK4d. The product does not show cross-reaction with the closely related CDK inhibitors, such as p15INK4b, p16INK4a and p18INK4c. The four known 15 to 19 kDa INK4 proteins (p15INK4b, p16INK4a, p18INK4c and p19INK4d) bind and inhibit cdk4 and cdk6 but not other CDKs. p19INK4d is periodically expressed during cell cycle. It is maximally induced as cells enter S-phase.

Monoclonal Mouse Anti-Human

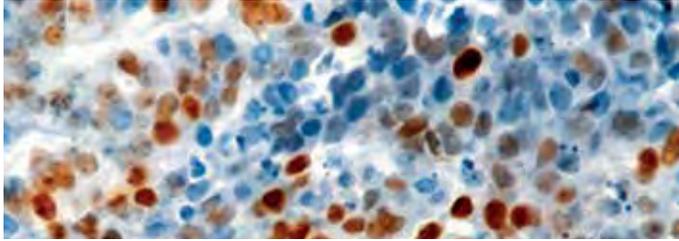
**p21WAF1/Cip1/Sdi1/Pic1 Mitotic Inhibitor** F, P/H

Clone: DCS-60.2

Catalog No.: Mob 280 Concentrated 1ml

Mob 280-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon carcinoma stained with p21WAF1 antibody (Mob 280).

Immunogen: BALB/C mice were injected with a full length human recombinant p21 protein.

Isotype: IgG2a

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: This antibody recognizes a 21 kDa protein identified as p21WAF1/Cip1/Sdi1/Pic1 tumor suppressor protein. This antibody is highly specific to p21 and does not show any cross-reactivity to other mitotic inhibitors. This antibody does not cross-react with mouse and rat.

Monoclonal Mouse Anti-Human

**p27Kip1** F, P/H

Clone: DCS-72

Catalog No.: Mob 452 Concentrated 1ml

Mob 452-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with mouse recombinant p27Kip1 protein.

Isotype: IgG1

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: Monoclonal anti-p27Kip1 recognizes p27Kip1 in immunoblotting (27 kDa), immunocytochemistry and immunoprecipitation. Higher and lower molecular weight bands, which may represent a polyubiquitinated species and breakdown products of p27Kip1, respectively.

Monoclonal Mouse Anti-Human

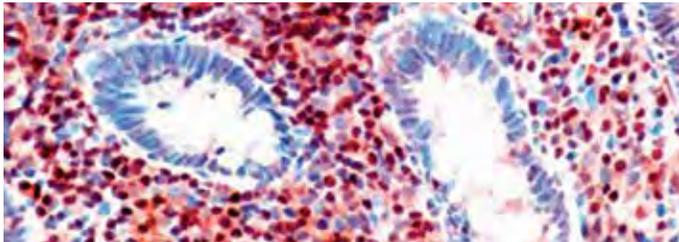
**p27Kip1** F, P/H

Clone: DCS-72.F6

Catalog No.: Mob 281 Concentrated 1ml

Mob 281-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon carcinoma stained with p27Kip1 antibody (Mob 281).

Immunogen: BALB/C mice were injected with mouse recombinant p27 protein.

Isotype: IgG1

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to a protein of 27 kDa known as p27Kip1 a cell cycle regulatory mitotic inhibitor. This antibody recognizes an epitope between amino acids 83-204 of p27. This antibody does not show any cross-reactivity with other related mitotic inhibitors.

Polyclonal Rabbit Anti-Human

**p40** P/H

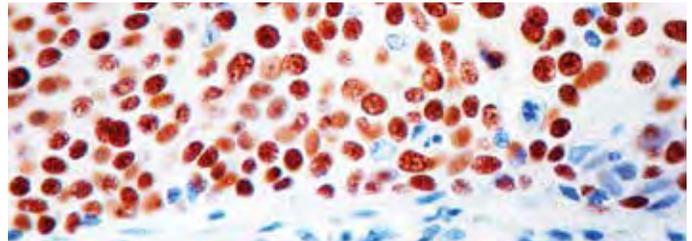
Catalog No: RP 163-05 Concentrated 0.5 ml

PDR 055 Prediluted 6ml

PDR055-10RP Prediluted 10ml 360



Regulatory Status: IVD



Formalin fixed paraffin embedded human lung squamous cell carcinoma stained with p40 antibody (PDR 055).

Immunogen: A synthetic peptide corresponding to amino acids 5-17 of human p40.

Positive Control: Prostate

Cellular Localization: Nuclear

Specificity: p40 is a relatively unknown antibody that recognizes ΔNp63-a p63 isoform suggested to be highly specific for squamous/basal cells. In a recent study, p40 is equivalent to p63 in sensitivity for squamous cell carcinoma, but it is markedly superior to p63 in specificity, which eliminates a potential pitfall of misinterpreting a p63-positive adenocarcinoma or unsuspected lymphoma as squamous cell carcinoma. These findings strongly support the routine use of p40 in place of p63 for the diagnosis of pulmonary squamous cell carcinoma.

Monoclonal Rabbit Anti-Human

**p53** F, P/H

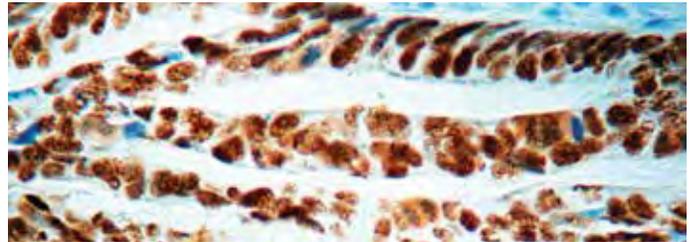
Clone: SP5

Catalog No.: RMAB 016 Concentrated 0.5ml

RMPD 016 Prediluted 6ml

RMPD016-10RM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded colon carcinoma stained with p53 antibody (RMAB016).

Immunogen: Recombinant human full-length wild type p53 protein.

Isotype: IgG

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: This antibody recognizes p53 protein. p53 is a tumor suppressor gene expressed in a wide variety of tissue types and is involved in regulating cell growth, replication, and apoptosis. It binds to mdm2, SV40 T antigen and human papilloma virus E6 protein. p53 senses DNA damage and possibly facilitates repair. Mutation involving p53 is found in a wide variety of malignant tumors, including breast, ovarian, bladder, colon, lung, and melanoma.

Monoclonal Mouse Anti-Human

**p53**

F, P/H

Clone: Bp53-12

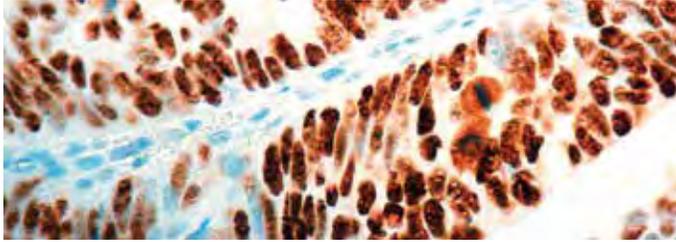
Catalog No.: Mob 217 Concentrated 1ml

Mob 217-05 Concentrated 0.5ml

PDM 035 Prediluted 6ml

PDM035-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded colon carcinoma stained with p53 antibody (Mob 217).

Immunogen: Recombinant wild type p53 protein.

Isotype: IgG2a

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to human p53 protein, both wild and mutant forms under denaturing and non-denaturing conditions. It maps the N-terminus region of the p53 molecule in the region of amino acids 20 and 25.

Monoclonal Mouse Anti-Human

**p53**

F, P/H

Clone: DO-7

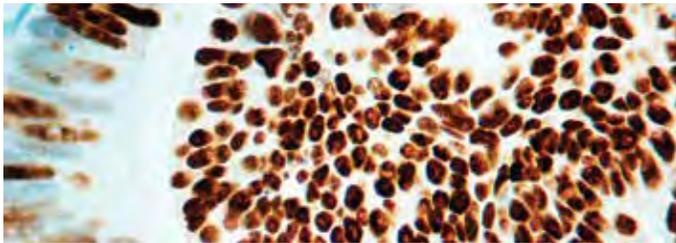
Catalog No.: Mob 082 Concentrated 1ml

Mob 082-05 Concentrated 0.5ml

PDM 013 Prediluted 6ml

PDM013-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded colon carcinoma stained with p53 antibody (Mob 082).

Immunogen: Recombinant human wild type P53 protein expressed in E. coli.

Isotype: IgG2b, kappa

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: This antibody reacts with wild as well as mutant types of P53 protein. It recognizes an epitope in the N-terminus of p53 protein, known to reside between amino acids 35 to 45. This antibody can be demonstrated in 22-76% of the colon, stomach, bladder, breast, lung and testes cancers.

Polyclonal Rabbit Anti-Human

**p53**

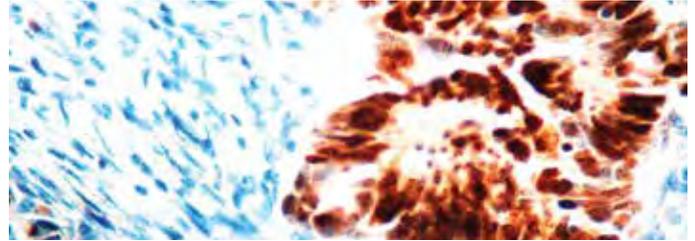
F, P/H

Catalog No.: RP 106 Concentrated 1ml

RP 106-05 Concentrated 0.5ml

PDR 051 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded colon carcinoma stained with p53 antibody (RP106).

Immunogen: Recombinant full-length wild type p53 protein.

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: This antibody reacts with a 53 kDa protein. p53 is a tumor suppressor gene expressed in a wide variety of tissue types. It is involved in regulating cell growth, replication and apoptosis. It binds to mdm2, SV40 T antigen and human papilloma virus E6 protein. Mutation involving p53 is found in wide variety of malignant tumors, including breast, ovarian, bladder, colon, lung and melanoma.

Polyclonal Rabbit Anti-Human

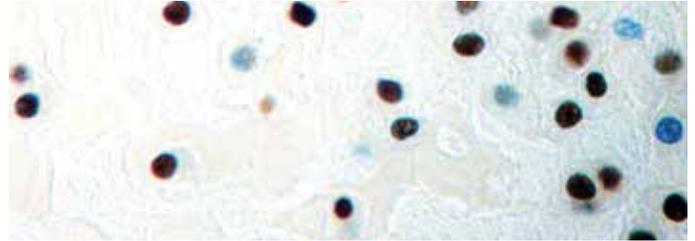
**p57Kip2**

F, P/H

Catalog No.: RP 104 Concentrated 1ml

RP 104-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human placenta stained with p57Kip2 antibody (RP 104).

Immunogen: A synthetic peptide from human p57Kip2 protein.

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: This antibody reacts with a 57 kDa protein. p57Kip2 protein is an inhibitor of several G1 cyclin complexes and is a negative regulator of cell proliferation. The gene encoding human p57Kip2 protein is located on chromosome 11p15.5, a region implicated in sporadic cancers, Wilm's tumor and Beckwith-Wiedemann syndrome.

Monoclonal Mouse Anti-Human

**p57Kip2**

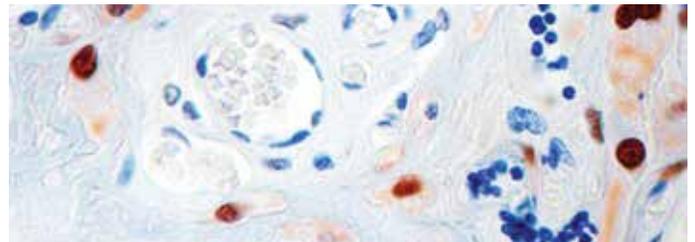
F, P/H

Clone: KP39

Catalog No.: Mob 451 Concentrated 1ml

Mob 451-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human placenta stained with p57Kip2 antibody (Mob 451).

Immunogen: BALB/C mice were immunized with a recombinant p57 Kip2.

Isotype: IgG2b

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to a protein of 57 kDa known as p57Kip2, a cell cycle regulatory mitotic inhibitor. This antibody does not cross-react with p27Kip1. p57Kip2 is a potent tight-binding inhibitor of several G1 cyclin complexes and is a negative regulator of cell proliferation.

Monoclonal Mouse Anti-Human

### p57Kip2

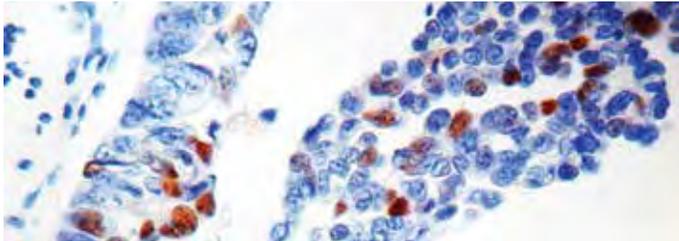
Clone: 57P06

Catalog No.: Mob 291 Concentrated 1ml

Mob 291-05 Concentrated 0.5ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded colon carcinoma stained with p57Kip2 antibody (Mob 291).

Immunogen: BALB/C mice were injected with mouse recombinant p57Kip2 protein.

Isotype: IgG2b, kappa

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to a protein of 57 kDa known as p57Kip2 a cell cycle regulatory mitotic inhibitor. This antibody does not cross-react with p27Kip1. p57Kip2 is a potent tight-binding inhibitor of several G1 cyclin complexes and a negative regulator of cell proliferation.

Monoclonal Mouse Anti-Human

### p63

Clone: 4A4

Catalog No.: Mob 306 Concentrated 1ml

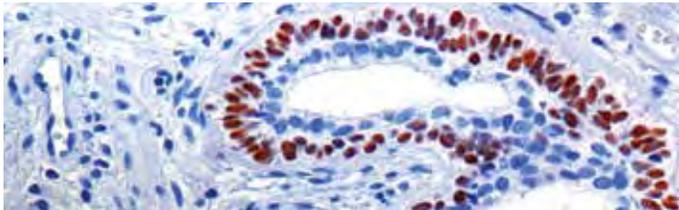
Mob 306-05 Concentrated 0.5ml

PDM 136 Prediluted 6ml

**PDM136-10MM Prediluted 10ml** 360

F, P

Regulatory Status: RUO



Formalin fixed paraffin embedded human prostate stained with p63 antibody (PDM136).

Immunogen: A recombinant protein derived from amino acid 1-205 of human p63.

Isotype: IgG2a, kappa

Positive Control: Skin

Cellular Localization: Nuclear

Specificity: This antibody recognizes a 63 kDa protein. The p63 gene is highly expressed in the basal or progenitor layers of many epithelial tissues. P63 shows remarkable structural similarity to the p53 gene. Unlike p53, the p63 gene encodes multiple isoforms with remarkably divergent abilities to transactivate p53 reporter genes and induce apoptosis.

Monoclonal Mouse Anti-Human

### p63

Clone: Y4A3

Catalog No.: Mob 450 Concentrated 1ml

Mob 450-05 Concentrated 0.5ml

F, P/H

Regulatory Status: RUO



Formalin fixed paraffin embedded human prostate stained with p63 antibody (Mob 450).

Immunogen: BALB/C mice were immunized with a recombinant protein from the N-terminus.

Isotype: IgG2a

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: This antibody recognizes a 63 kDa protein. The p63 gene is highly expressed in the basal or progenitor layers of many epithelial tissues. P63 shows remarkable structural similarity to p53 gene. Unlike p53, the p63 gene encodes multiple isoforms with remarkably divergent abilities to transactivate p53 reporter genes and induce apoptosis.

Monoclonal Mouse Anti-Human

### p80/Anaplastic Lymphoma Kinase

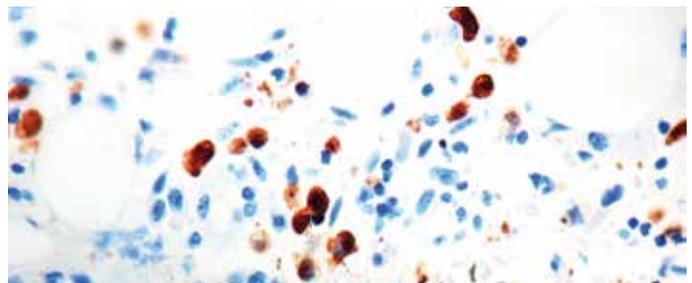
Catalog No.: Mob 416 Concentrated 1ml

Mob 416-05 Concentrated 0.5ml

F, P/H

Clone: 5A4

Regulatory Status: IVD



Formalin fixed paraffin embedded anaplastic lymphoma kinase stained with p80 ALK antibody (Mob 416).

Immunogen: Prokaryotic recombinant protein corresponding to a region which spans the tyrosine kinase catalytic domain and part of the C-terminus of NPM-ALK transcript (419-520 aa).

Isotype: IgG1

Positive Control: Anaplastic lymphoma

Cellular Localization: Cytoplasmic and/or nuclear

Specificity: Anaplastic large cell lymphoma (ALCL) is usually composed of large pleomorphic cells, which express CD30 antigen and the epithelial membrane antigen (EMA). These tumor cells tend to occur in younger patients and may be associated with cutaneous and extranodal involvement. Large cell lymphoma account for approximately 25% of all non-Hodgkin lymphomas in children and young adults.

Monoclonal Mouse Anti-Human

### P170/P-Glycoprotein/MDR

Clone: F4

Catalog No.: Mob 358-1 Concentrated 1ml

Mob 358-1-05 Concentrated 0.5ml

F, P/H

Regulatory Status: IVD

Immunogen: Mixture of drug resistant human and hamster whole cells and crude plasma membranes.

Isotype: IgG1

Positive Control: Adrenal tissue

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a 170 kDa protein. Multi-drug resistance (MDR) associated with P-glycoprotein (p170) causes resistance to various drugs in a number of cancer patients. P-glycoprotein exists as a soluble and membrane associated form. Soluble p-glycoprotein is detected in extracellular fluids of cancer patients, such as malignant ascites and serum. It reacts with human MDR1 P-glycoprotein, but not human MDR3 product, mouse mdr1a, mdr1b or mdr3 P-glycoprotein.

Monoclonal Mouse Anti-Human

**P300/CBP**

F, P/H

Clone: NM11

Catalog No.: Mob 374 Concentrated 1ml

Mob 374-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were immunized with E1A affinity purified p300 protein.

Isotype: IgG2b, kappa

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: This antibody stains a 300 kDa protein. P300 and CBP (CREB-binding protein) are homologous to each other. P300 is transcriptional adapter protein, which is characterized by three cysteine and histidine-rich regions. Protein kinase A mediated CREB phosphorylation results in the binding of CREB to a 265 kDa nuclear protein designated CBP.

Monoclonal Rabbit Anti Human

**p504S/ $\alpha$ -Methylacyl-CoA Racemase (AMACR)**

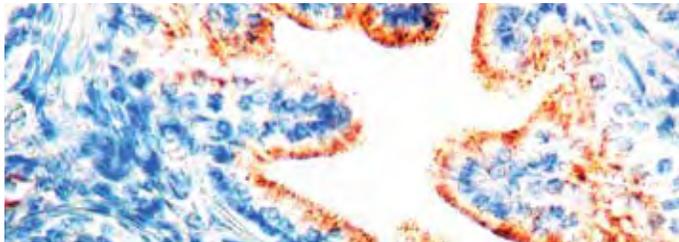
F, P/H

Clone: 13H4

Catalog No.: Mob 438 Concentrated 1ml

Mob 438-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded prostate carcinoma stained with p504S antibody (Mob 438).

Immunogen: Full length recombinant p504S.

Isotype: IgG

Positive Control: Prostate adenocarcinoma, HEK293 cells

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes a 382 amino acid protein and a 54 kDa protein. P504S has been recently described as a prostate cancer-specific gene that encodes a protein involved in the  $\beta$ -oxidation of branched chain fatty acids. Expression of p504S protein is found in prostatic adenocarcinoma but not in benign prostatic tissue. It stains premalignant lesions of prostate: high-grade prostatic intraepithelial neoplasia (PIN) and atypical adenomatous hyperplasia.

Polyclonal Rabbit Anti-Human

**p504S/ $\alpha$ -Methylacyl-CoA Racemase (AMACR)**

F, P/H

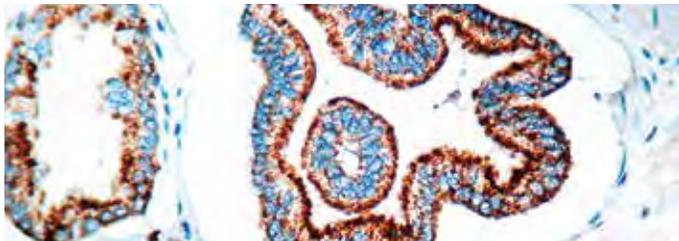
Catalog No.: RP 134 Concentrated 1ml

RP 134-05 Concentrated 0.5ml

PDR 046 Prediluted 6ml

PDR046-10RP Prediluted 10ml 360

Regulatory Status: RUO



Formalin fixed paraffin embedded prostate carcinoma stained with p504S antibody (RP 134).

Immunogen: A synthetic human AMACR peptide.

Positive Control: Prostate carcinoma

Cellular Localization: Cytoplasmic

Specificity: P504S has been recently described as a prostate cancer-specific gene that encodes a protein involved in the  $\beta$ -oxidation of branched chain fatty acids. Expression of p504S protein is found in prostatic adenocarcinoma but not in benign prostatic tissue. It stains premalignant lesions of prostate: high-grade prostatic intraepithelial neoplasia (PIN) and atypical adenomatous hyperplasia. P504S can be used as a positive marker for PIN.

PIN Cocktail Antibody

**p504S+p63**

F, P/H

Clone: 4A4 (p63)

Catalog No.: Mob 427 Concentrated 1ml

Mob 427-05 Concentrated 0.5ml

PDM 129 Prediluted 6ml

PDM129-10MM Prediluted 10ml 360

Regulatory Status: RUO



Formalin fixed paraffin embedded prostate carcinoma stained with p504S+p63 antibody (Mob 427).

Immunogen: A recombinant protein derived from amino acid 1-205 of human p63. A synthetic human AMACR peptide.

Isotype: IgG2a

Positive Control: Prostate carcinoma

Cellular Localization: p504S: cytoplasmic; p63: nuclear

Specificity: P504S has been recently described as a prostate cancer-specific gene that encodes a protein involved in the  $\beta$ -oxidation of branched chain fatty acids. Expression of p504S protein is found in prostatic adenocarcinoma but not in benign prostatic tissue. It stains premalignant lesions of prostate: high-grade prostatic intraepithelial neoplasia (PIN) and atypical adenomatous hyperplasia. P504S can be used as a positive marker for PIN.

The p63 gene is highly expressed in the basal or progenitor layers of many epithelial tissues. P63 shows remarkable structural similarity to the p53 gene. Unlike p53, the p63 gene encodes multiple isoforms with remarkably divergent abilities to transactivate p53 reporter genes and induce apoptosis.

The combination of p504S and p63 may be extremely useful for diagnosing prostatic intraepithelial neoplasia (PIN). P504S stains cytoplasm in prostatic adenocarcinomas and atypical hyperplasia and p63 stains nuclei in normal and benign prostate glands.

Polyclonal Rabbit Anti-Human

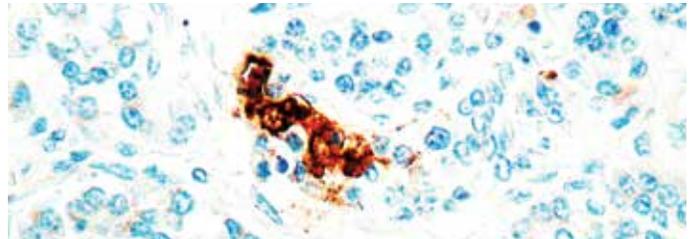
**Pancreatic Polypeptide**

F, P

Catalog No.: RP 030 Concentrated 1ml

RP 030-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human pancreas stained with Pancreatic Poly Peptide antibody (RP 030).

Immunogen: Synthetic human pancreatic polypeptide conjugated to keyhole limpet hemocyanin.

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with pancreatic polypeptide. It stains the periphery of islets, exocrine pancreatic parenchyma and the epithelium of small and medium sized ducts and acinar cells.

Monoclonal Rabbit Anti-Human

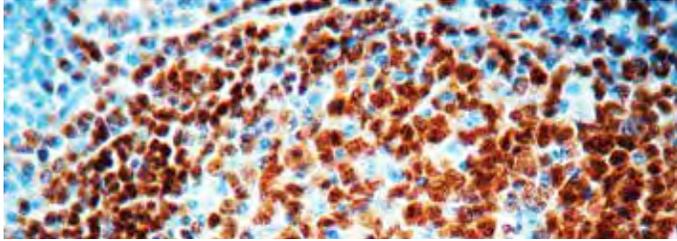
### Pax-5

F, P/H

Clone: BV6

Catalog No.: RMAB 027 Concentrated 0.5ml  
RMPD 027 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Pax-5 antibody (RMAB 027).

Immunogen: A synthetic cyclic peptide from the antigen C-terminus.

Isotype: IgG

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: The PAX proteins are important regulators in early development, and alterations in the expression of their genes are thought to contribute to neoplastic transformation. The PAX5 gene encodes the B-cell lineage specific activator protein (BSAP) that is expressed at early, but not late stages of B-cell differentiation. Its expression has also been detected in developing CNS and testis; therefore, PAX5 gene product may not only play an important role in B-cell differentiation, but also in neural development and spermatogenesis.

Pax-5 expression is not only continuously required for B cell lineage commitment during early B cell development but also for B lineage maintenance. Pax-5 is found in most cases of mature and precursor B-cell non-Hodgkin lymphomas/leukemias. Pax-5 is not detected in multiple myeloma and solitary plasmacytoma, making it useful for such differentiation. Diffuse large B-cell lymphomas do express Pax-5 except for those with terminal B-cell differentiation. T-cell neoplasms do not stain with anti-Pax-5; however there is a strong association with CD20 expression.

Monoclonal Mouse Anti-Human

### Pax-8

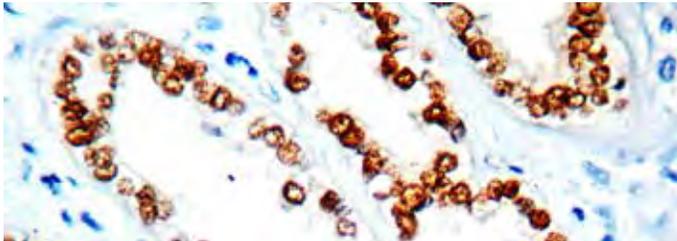
P/H

NEW

Clone: BC12

Catalog No.: PDM 180 Prediluted 6ml  
PDM180-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded Renal Cell Carcinoma stained with Pax 8 antibody (PDM 180).

Immunogen: ag0306

Isotype: IgG1

Positive Control: Normal kidney, renal cell, or serous ovarian carcinomas

Cellular Localization: Nuclear

Specificity: PAX 8 is expressed in a high percentage of renal cell carcinomas and ovarian cancers. This mouse monoclonal PAX 8 antibody [BC12] has been designed to target restricted epitopes, and exhibits higher specificity and provides sharper staining than the PAX 8 rabbit polyclonal antibody. Unlike the polyclonal PAX 8, this mouse monoclonal antibody does not stain B-cells, and does not recognize epitopes of pancreatic origin and neuroendocrine cells in stomach and colon; thus providing superior specificity. The expression of the mouse monoclonal PAX 8 targets antigens found in normal kidney, thyroid and cervix, but not normal ovary. PAX 8 stains nuclei exclusively and performs well in formalin-fixed paraffin-embedded tissues.

Monoclonal Mouse Anti-Human

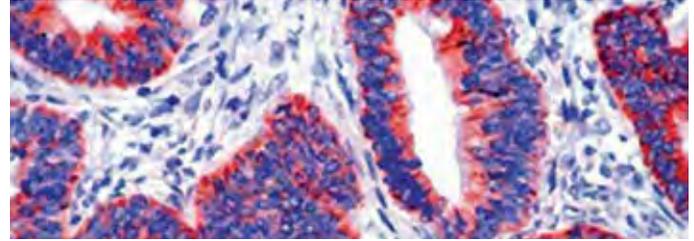
### Paxillin

F, P/H

Clone: 5H11

Catalog No.: Mob 385 Concentrated 1ml  
Mob 385-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon carcinoma stained with Paxillin antibody (Mob 385).

Immunogen: BALB/C mice were immunized with purified full-length recombinant human paxillin protein.

Isotype: IgG1, kappa

Positive Control: Colon carcinoma

Cellular Localization: Cell membrane, cytoplasmic

Specificity: This antibody binds to a protein of 68 kDa. Paxillin is a focal adhesion protein and a substrate for several tyrosine kinases such as src, FAK and p210 bcr/abl. The tyrosine phosphorylation of paxillin is affected by conditions that change cell-cell adhesion. Although paxillin was initially discovered in fibroblasts, its phosphorylation may also be important during neurite extension during differentiation.

Monoclonal Mouse Anti-Human

### Perforin

F, P/H

Catalog No.: Mob 310-1 Concentrated 1ml  
Mob 310-1-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Recombinant protein corresponding to an external region of the C-terminus of the perforin molecule

Clone: 5B10

Isotype: IgG1

Positive Control: Spleen

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to a 70 kDa protein, which is a potent cytolytic pore-forming protein. Perforin is a specific marker of functionally active cytotoxic T-lymphocytes and natural killer cells. Perforin mediates cytolysis of target cells by membrane damage and apoptosis.

Anti-Human

### PIN-4

Catalog No.: PDM 161

USA Clinical Users: Please contact Diagnostic BioSystems for information.

1-888-896-3350 OR orders@dbiosys.com

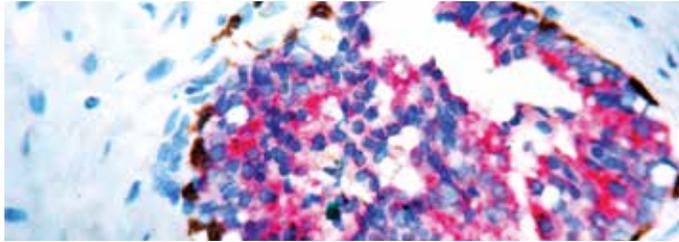
Combination Antibody

**PIN-4 Antibody Cocktail Mouse anti-p63 + Mouse anti-Cytokeratin (HMW) + Rabbit anti-p504S (AMACR)** **F,P/H**

Clones: 4A4 (p63) + 34βE12 (CK HMW)

Catalog No.: PDM 157 Prediluted 6 mL  
PDM 157-12 Prediluted 12ml

Regulatory Status: RUO



Formalin fixed paraffin embedded prostate carcinoma stained with Pin4 antibody (PDM 157).

Immunogens: Recombinant protein derived from human p63 (amino acids 1-205); solubilized keratin extracted from human stratum corneum; synthetic peptide derived from human α-methylacyl-CoA racemase (AMACR)/ p504S amino acid sequence.

Isotypes: 4A4, IgG2a; 34βE12, IgG1

Positive Control: Prostatic intraepithelial neoplasia (PIN)

Cellular Localization: p63: nuclear; cytokeratin (HMW): cytoplasmic; p504S (AMACR): cytoplasmic

Specificity in Prostate Tissues: The combined detection of p504S, p63 and high molecular weight cytokeratin markers has been shown to be useful for distinguishing benign conditions mimicking cancer from prostate carcinomas. In particular, these markers have been shown to be relevant in diagnosing the premalignant condition, prostatic intraepithelial neoplasia (PIN).

Benign prostate tissue contains basal cells, which are absent in prostate cancers. High molecular weight cytokeratin and p63 are commonly used markers of basal epithelial cells. P504S has been recently described as a prostate cancer-specific gene. Anti-p504S stains prostatic adenocarcinoma, premalignant lesions of prostate (high-grade PIN and atypical adenomatous hyperplasia), but not benign prostatic tissue.

The PIN-4 antibody combination may be particularly useful for confirming the diagnosis of prostate carcinoma in small foci of needle biopsies. The positive prostate cancer marker, p504S (AMACR), in conjunction with the negative basal cell markers (p63 and HMW cytokeratin) offers utility in diagnosing PIN in difficult cases where tissue may be limiting. This cocktail is intended for use in two-color double staining assays with species-specific IHC development systems.



**Did you know?**

The dandelion is grown as a crop in Belgium? DBS has two distribution partners in Belgium to serve you and over 60 distribution partners worldwide. ■

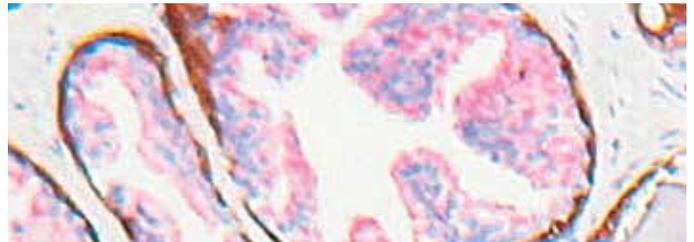
Combination Antibody

**PIN-4 Antibody Combo Mouse anti-P63 + Mouse anti-Cytokeratin (HMW) and Rabbit anti-p504S (AMACR)** **F, P/H**

Clones: 4A4 (p63) + 34βE12 (CK HMW)

Catalog No.: PDM 156-12 Prediluted 12ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human prostate carcinoma double-stained with PIN-4 combo antibody (PDM 156)

Immunogens: Recombinant protein derived from human p63 (amino acids 1-205); solubilized keratin extracted from human stratum corneum; synthetic peptide derived from human α-methylacyl-CoA racemase (AMACR)/p504S amino acid sequence.

Isotype: 4A4, IgG2a; 34βE12, IgG1

Positive Control: Prostatic intraepithelial neoplasia (PIN)

Cellular Localization: p63: nuclear; cytokeratin (HMW): cytoplasmic; p504S (AMACR): cytoplasmic

Specificity: The combined detection of p504S, p63 and high molecular weight cytokeratin markers has been shown to be useful for distinguishing benign conditions mimicking cancer from prostate carcinomas. In particular, these markers have been shown to be relevant in diagnosing the premalignant condition, prostatic intraepithelial neoplasia (PIN).

High molecular weight cytokeratin and p63 are commonly used markers of basal epithelial cells. Benign prostate tissue contains basal cells, which are absent in prostate cancers. P504S has been recently described as a prostate cancer-specific gene. Expression of p504S (AMACR) protein is seen in prostatic adenocarcinoma but not in benign prostatic tissue. Anti-p504S stains premalignant lesions of prostate: high-grade PIN and atypical adenomatous hyperplasia. This antibody combination is intended for two-color double staining use. It is suitable for use with broad spectrum IHC development systems.

Monoclonal Mouse Anti-Human

**Placental Alkaline Phosphatase (PLAP)** **F, P/E**

Clone: 8B6

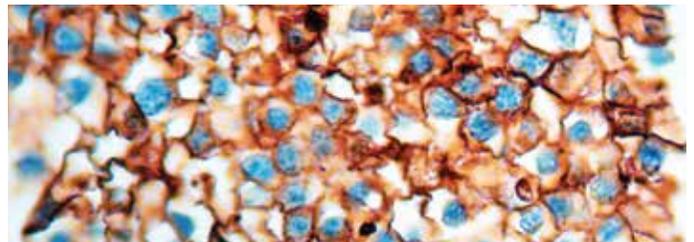
Catalog No.: Mob 236 Concentrated 1ml

Mob 236-05 Concentrated 0.5ml

PDM 090 Prediluted 6ml

PDM090-10MM Prediluted 10ml **3 6 0**

Regulatory Status: IVD



Formalin fixed paraffin embedded testis seminoma stained with PLAP antibody (Mob 236).

Immunogen: Whole cells (Hep-2) expressing placental alkaline phosphatase.

Isotype: IgG2a, kappa

Positive Control: Placenta

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to PLAP. This antibody stains germ cells and trophoblastic neoplasms, (e.g. seminoma/dysgerminoma, embryonal carcinoma, yolk-sac tumor, choriocarcinoma) and carcinoma in situ of testis.

Monoclonal Rabbit Anti-Human  
**Placental Alkaline Phosphatase (PLAP)**

F, P/H

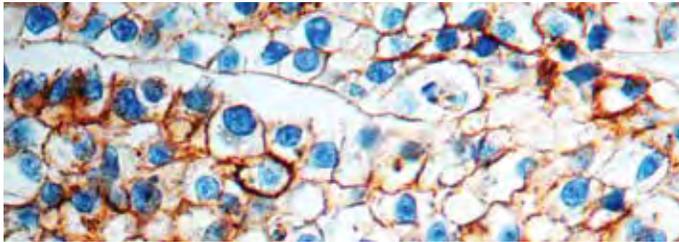
Clone: SP15

Catalog No.: RMAB 017 Concentrated 0.5ml

RMPD 017 Prediluted 6ml

RMPD017-10RM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded testis seminoma stained with PLAP antibody (RMAB 017).

Immunogen: Recombinant protein encoding human placental alkaline phosphatase (PLAP).

Isotype: IgG

Positive Control: Placenta

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a membrane-bound isoenzyme (Regan and Nagao type) of placental alkaline phosphatase (PLAP) occurring in the placenta during the 3rd trimester of gestation. This antibody is highly specific to PLAP and shows no cross-reaction with other isoenzymes of alkaline phosphatases. It is useful in the identification of testicular germ cell tumors. Unlike germ cell tumors, PLAP-positive somatic cell tumors uniformly express epithelial membrane antigen (EMA).

Polyclonal Rabbit Anti-Human

**Platelet-Derived Growth Factor (PDGF)**

F, P/H

Catalog No.: RP 145 Concentrated 1ml

RP 145-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: A synthetic peptide derived from aa 101-116 of the human PDGF B chain.

Positive Control: Angiosarcoma

Cellular Localization: Cytoplasmic

Specificity: Platelet-Derived Growth Factor (PDGF) is the major serum mitogen for cells of mesenchymal origin in humans. The biologically active protein is a dimer composed of two related polypeptides designated A and B. The PDGF protein has been implicated both directly as well as indirectly in several pathological states including neoplasia, arthritis, arteriosclerosis and bone marrow sclerosis. This antibody is specific for the B form and reacts with PDGF (AB) and PDGF (BB) protein.

Monoclonal Mouse Anti-Human

**PMS2**

P/H

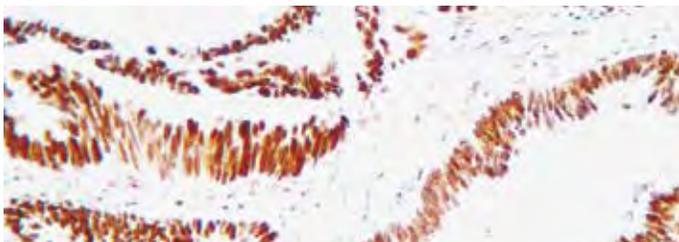


Clone: A16-4

Catalog No.: PDM 171 Prediluted 6ml

PDM171-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded colon adenocarcinoma stained with PMS2 (PDM 171).

Immunogen: Recombinant human PMS2 (C-terminus)

Isotype: IgG1, κ

Positive Control: Colon carcinoma, tonsil

Cellular Localization: Nuclear

Specificity: Postmeiotic segregation increased 2 or PMS2 was originally discovered in *S. cerevisiae* and is part of the mismatch repair system. It resides on 7p22.2 and its gene product partners with MLH1 to help detect mismatches in DNA. Mutations in PMS2 have been reported in about two percent of families with Lynch syndrome (hereditary nonpolyposis colorectal cancer).

Monoclonal Mouse Anti-Human

**Pneumocystis Carinii**

F, P/E

Clone: 3F6

Catalog No.: Mob 091 Concentrated 1ml

Mob 091-05 Concentrated 0.5ml

Regulatory Status: ASR

Immunogen: BALB/C mice were injected with *P. carinii* cysts isolated from human lung.

Isotype: IgM, kappa

Positive Control: Infected lung

Cellular Localization: Alveolar spaces

Specificity: This antibody reacts with *P. carinii* in the fixed human tissues. The antibody is specific against an 82 kDa parasite specific polypeptide. It does not cross-react with *G. lamblia*, *T. gondii*, *T. cruzi*, *L. tropica*, *E. histolytica*, *C. albicans* and *P. falciparum*.

Polyclonal Rabbit Anti-Human

**Poly ADP-Ribose Polymerase, (PARP)**

F, P/H

Catalog No.: RP 067 Concentrated 1ml

RP 067-05 Concentrated 0.5ml

Regulatory Status: RUO

Immunogen: A synthetic peptide from the N-terminal region of human PARP.

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: This antibody reacts with a 116 kDa protein, known as PARP. Proteolysis of PARP to its stable 85 kDa fragment is an early marker of apoptosis and is mediated by caspase (CPP32) protein. PARP uses nicotinamide adenine dinucleotide (oxidized form) as a substrate to catalyze the transfer of ADP-ribose to a variety of nuclear acceptors.

Monoclonal Rabbit Anti-Human

**Progesterone Receptor**

F, P/H

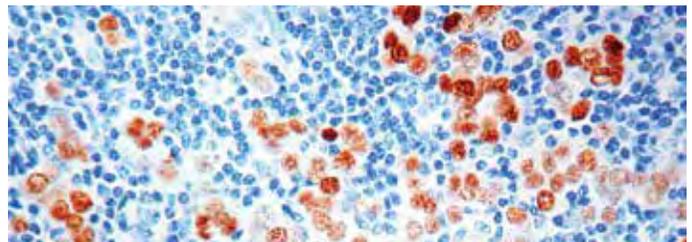
Clone: SP2

Catalog No.: RMAB 002 Concentrated 0.5ml

RMPD 002 Prediluted 6ml

RMPD002-10RM Prediluted 10ml **360**

Regulatory Status: ASR



Formalin fixed paraffin embedded breast carcinoma stained with Progesterone Receptor antibody (RMAB 002).

Immunogen: Recombinant protein encoding human progesterone receptor 412-526 aa.

Isotype: IgG

Positive Control: Breast Carcinoma

Cellular Localization: Nuclear

Specificity: The progesterone receptor (PgR) is an estrogen-regulated protein. It has been proposed that expression of PgR indicates a responsive estrogen receptor (ER) pathway. A number of studies have shown that PgR determination provides supplementary information to ER, both in predicting response to endocrine therapy and estimating survival. PgR has proved superior to ER as a prognostic indicator in some studies.

Monoclonal Mouse Anti-Human

### Progesterone Receptor

Clone: PGR-1A6

F, P/H



Catalog No.: Mob 103-01 Concentrated 1ml

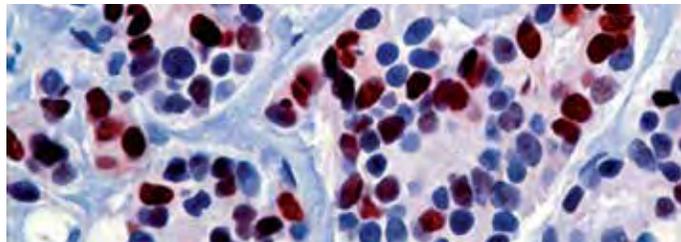
Mob 103-01-05 Concentrated 0.5ml

PDM 025 Prediluted 5ml

PDM 025-01 Prediluted 6ml

PDM025-01-10MM Prediluted 10ml **360**

Regulatory Status: ASR



Formalin fixed paraffin embedded human breast carcinoma stained with Progesterone Receptor antibody (Mob 103).

Immunogen: Recombinant human progesterone protein.

Isotype: IgG1, kappa

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: This antibody is specific to human progesterone receptor protein. Progesterone receptor is an estrogen regulated protein and its expression indicates a responsive estrogen receptor pathway.

Monoclonal Rabbit Anti-Human

### Progesterone Receptor

Clone: BV7

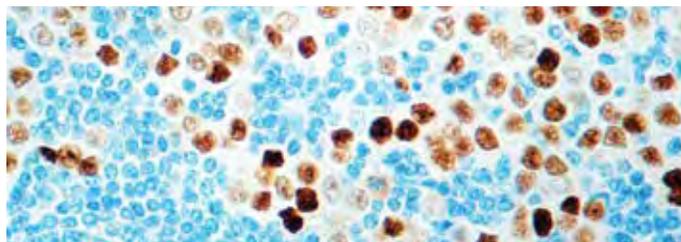
F, P/H

Catalog No.: RMAB 028 Concentrated 0.5ml

RMPD 028 Prediluted 6ml

RMPD028-10RM Prediluted 10ml **360**

Regulatory Status: ASR



Formalin fixed paraffin embedded breast carcinoma stained with Progesterone Receptor antibody (RMAB028).

Immunogen: A synthetic cyclic peptide from the antigen C-terminus.

Isotype: IgG

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: The progesterone receptor (PR) is an intracellular steroid receptor that specifically binds progesterone. Expressed by a single gene (chromosome 11q22), it has two main forms, A and B, that differ in their molecular weight. It has been proposed that expression of PR indicates a responsive estrogen receptor (ER) pathway. A number of studies have shown that PR determination provides supplementary information to ER in predicting response to endocrine therapy as well as estimating survival. PR has proved superior to ER as a prognostic indicator in some studies.

Polyclonal Rabbit Anti-Human

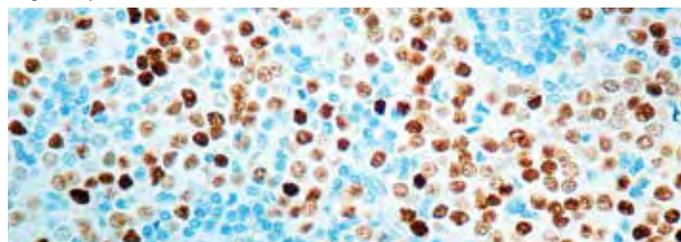
### Progesterone Receptor

F, P/H

Catalog No.: RP 146 Concentrated 1ml

RP 146-05 Concentrated 0.5ml

Regulatory Status: ASR



Formalin fixed paraffin embedded human breast carcinoma stained with Progesterone Receptor antibody (RP 146).

Immunogen: A synthetic peptide derived from the C-terminal of human progesterone receptor.

Positive Control: Breast carcinoma

Cellular Localization: Nuclear

Specificity: Human progesterone receptor (PR) exists in two forms: 116kDa (B-form) and 81kDa (A-form). It acts as a ligand activated transcription factor to regulate expression of the target genes. Null mutation in PR gene leads to pleiotropic reproductive abnormalities.

Monoclonal Mouse Anti-Human

### Prohibitin

F, P/H

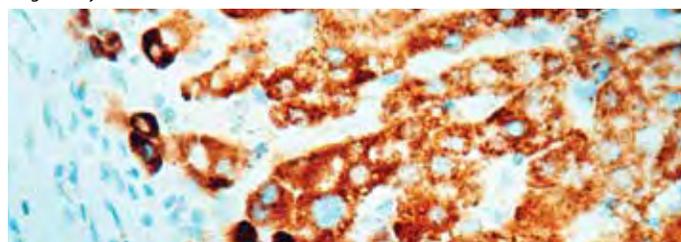
Clone: II-14-10

Catalog No.: Mob 323 Concentrated 1ml

Mob 323-05 Concentrated 0.5ml

PDM 152 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded liver hepatocellular carcinoma stained with Prohibitin antibody (Mob 323).

Immunogen: BALB/C mice were injected with purified recombinant rat prohibitin protein.

Isotype: IgG1

Positive Control: Heart

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to a 30 kDa protein known as prohibitin. Prohibitin is an evolutionarily conserved protein located in the inner membrane of mitochondria. Prohibitin shows antiproliferative activity and has been proposed to play a role in normal cell cycle regulation, replicative senescence, cellular immortalization and tumor suppression.

Monoclonal Mouse Anti-Human

### Proliferating Cell Nuclear Antigen (PCNA)

F, P/H

Clone: PC10

Catalog No.: Mob 083 Concentrated 1ml

Mob 083-05 Concentrated 0.5ml

PDM 014 Prediluted 6ml

Regulatory Status: IVD

Immunogen: Rat PCNA made in the protein A expression vector pRIT2T.

Isotype: IgG2a, kappa

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: PCNA is essential for cellular DNA synthesis. This antibody reacts with proliferating cells in a wide range of normal tissues. The significance of PCNA immunoreactivity in tumors is not fully established. However, in non-Hodgkin lymphoma a linear relation between Ki-67 and PCNA staining has been demonstrated.

Polyclonal Rabbit Anti-Human

### Proliferating Cell Nuclear Antigen (PCNA)

F, P/H

Catalog No.: RP 125 Concentrated 1ml  
RP 125-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Recombinant human PCNA protein.

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: This antibody reacts with a 36 kDa protein. Expression of proliferating cell nuclear antigen (PCNA) or cyclin or polymerase  $\delta$  auxiliary protein is elevated in nuclei during late G1 phase immediately before the onset of DNA synthesis, becomes maximal during S phase and declines during G2 and M phases. PCNA may act as an auxiliary protein of DNA polymerase- $\delta$  to play a functional role in the initiation of cell proliferation.

Monoclonal Mouse Anti-Human

### Prostate Specific Antigen (PSA)

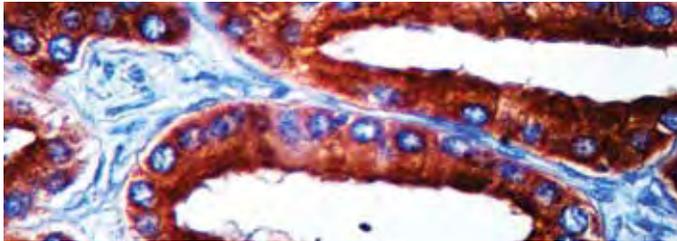
F, P

Clone:35H9

Catalog No.: Mob 084-1 Concentrated 1ml  
Mob 084-1-05 Concentrated .05ml  
PDM 087-1 Prediluted 6ml  
PDM087-1-10MM Prediluted 10ml

3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human prostate stained with PSA antibody (PDM 087-1).

Immunogen: Prokaryotic recombinant protein corresponding to a portion of the N-terminus of the prostate specific antigen molecule.

Isotype: IgG1.

Positive Control: Prostate carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with human prostate specific antigen.

Polyclonal Rabbit Anti-Human

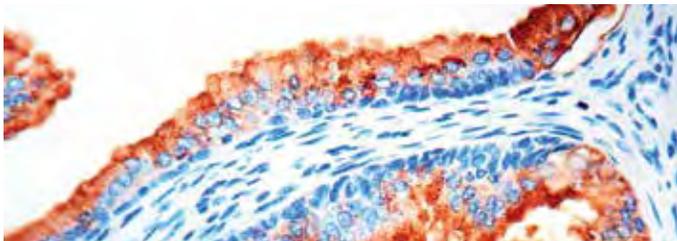
### Prostate Specific Antigen (PSA)

F, P

Catalog No.: RP 033 Concentrated 1ml  
RP 033-05 Concentrated 0.5ml  
PDR 007 Prediluted 6ml  
PDR007-10RP Prediluted 10ml

3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded prostate carcinoma stained with PSA antibody (RP 033).

Immunogen: Prostate specific antigen isolated from human seminal plasma.

Positive Control: Prostate carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with PSA. The staining was observed in the prostatic ductal epithelium of normal and neoplastic prostate. No staining with any other cell type has been observed.

Monoclonal Mouse Anti-Human

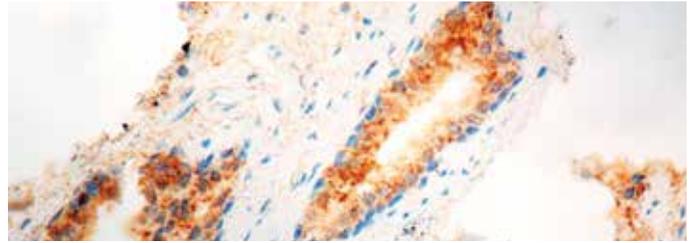
### Prostate Specific Membrane Antigen (PSMA)

F, P/H

Clone: 3E6

Catalog No.: Mob 440 Concentrated 1ml  
Mob 440-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded prostate carcinoma stained with PSMA antibody (Mob 440).

Immunogen: BALB/C mice were injected with LNCaP membrane preparation and immunoaffinity purified PSMA.

Isotype: IgG1

Positive Control: Prostate carcinoma

Cellular Localization: Cytoplasmic and/or membrane

Specificity: PSMA is a 750 amino acid type II membrane glycoprotein. PSMA is expressed in normal and malignant prostatic epithelium and in a subset of non-prostatic tissues. PSMA expression has been shown to correlate with the progression of prostate cancer, with highest levels expressed in hormone-refractory and metastatic disease. PSMA expresses in the neovasculature of a variety of non-prostatic solid tumors.

Monoclonal Rabbit Anti-Human Human

### Prostate Specific Membrane Antigen (PSMA)

F, P/H

Clone:BV9

Catalog No.: RMAB 030 Concentrated 0.5ml  
RMPD 030 Prediluted 6ml

Regulatory Status: IVD

Immunogen: A synthetic peptide from the C-terminus of human PSMA protein.

Isotype: IgG

Positive Control: Prostate carcinoma

Cellular Localization: Membrane

Specificity: PMSA (FOLH1) is a type II transmembrane glycoprotein belonging to the M28 peptidase family. Three functionally distinct proteins are encoded, including folyl-poly- $\gamma$ -glutamate carboxypeptidase in the intestine, N-acetylated  $\alpha$ -linked acidic dipeptidase-1 in the brain, and prostate-specific membrane antigen in the prostate. A mutation in the intestinal form may be associated with impaired intestinal absorption of dietary folates, resulting in low blood folate levels and consequent hyperhomocysteinemia. The form expressed in the brain may be involved in a number of pathological conditions associated with glutamate excitotoxicity. The prostate form is upregulated in cancerous cells and is used as an effective diagnostic and prognostic indicator of prostate cancer. This gene likely arose from a duplication event of a nearby chromosomal region.

Monoclonal Mouse Anti-Human

### Prostatic Acid Phosphatase (PSAP)

Clone: PASE/4LJ

Catalog No.: Mob 085 Concentrated 1ml

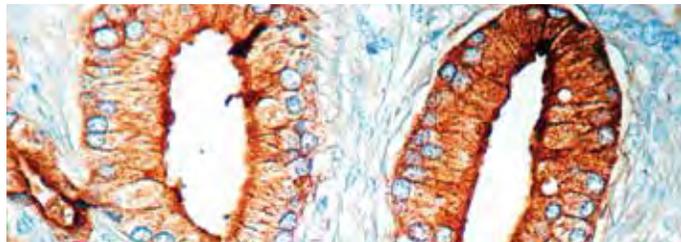
Mob 085-05 Concentrated 0.5ml

PDM 037 Prediluted 6ml

PDM037-10MM Prediluted 10ml **3 6 0**

F, P

Regulatory Status: IVD



Formalin fixed paraffin embedded prostate carcinoma stained with PSAP antibody (Mob 085).

Immunogen: BALB/C mice were injected with purified prostatic acid phosphatase from human seminal plasma.

Isotype: IgG1, kappa

Positive Control: Prostate carcinoma

Cellular Localization: Cytoplasm

Specificity: This antibody is specific to human prostatic acid phosphatase. It reacts with the glandular epithelium of normal and hyperplastic prostate and with prostate adenocarcinoma.

Polyclonal Rabbit Anti-Human

### Protein Gene Product 9.5 (PGP9.5)

Catalog No.: RP 087 Concentrated 1ml

RP 087-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Purified PGP 9.5 protein isolated from bovine brain.

Positive Control: Pancreatic tumor

Cellular Localization: Nuclear and cytoplasmic

Specificity: This antibody reacts with a 25-27 kDa protein. Protein gene product 9.5 is a ubiquitin C-terminal hydroxylase found in neurons and nerve fibers of central and peripheral nervous system, many neuroendocrinal cells, segments of renal tubules, spermatogonia, Leydig cells of testis and ova. It is present in cellular inclusions and can be a useful neuronal marker and in the studies of neurodegenerative disorders.

F, P/H

Monoclonal Mouse Anti-Human

### Rad51

Clone: 51RAD01

Catalog No.: Mob 324 Concentrated 1ml

Mob 324-05 Concentrated 0.5ml

Regulatory Status: RUO

Immunogen: BALB/C mice were injected with recombinant Rad51 protein.

Isotype: IgG1, kappa

Positive Control: Testis

Cellular Localization: Nuclear

Specificity: This antibody is specific to a 37-43 kDa protein known as Rad51. Rad51 is similar to RecA. Rad51 promotes homologous pairing and strand exchange within a regular nucleoprotein filament. Rad51 has been suggested to be involved in homologous recombination and in cell proliferation regulation.

F, P/H

Monoclonal Mouse Anti-Human

### Renal Cell Carcinoma (gp200)

Clone: PN-15

Catalog No.: Mob 465 Concentrated 1ml

Mob 465-05 Concentrated 0.5 ml

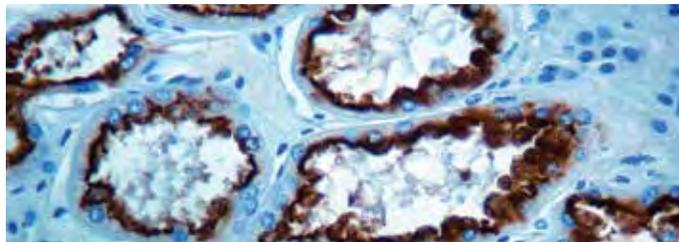
PDM 169-Prediluted 6ml

PDM169-10MM Prediluted 10ml **3 6 0**

P/E



Regulatory Status: IVD



Formalin fixed paraffin embedded human kidney stained with RCC antibody (PDM 169).

Immunogen: BALB/C mice were injected with human renal cortical tissue homogenate.

Isotype: IgG1

Positive Control: Normal kidney or renal cell carcinoma

Cellular Localization: Membrane

Specificity: This antibody recognizes a 200 kD glycoprotein (gp200) localized in the brush border of the proximal renal tubules and the luminal surface of Bowman's capsule. gp200 was expressed by 93% of primary and 84% of metastatic renal carcinomas. Gp200 glycoprotein is also localized in the breast lobules and ducts, parathyroid glands and epididymis.

Monoclonal Mouse Anti-Human

### Retinoblastoma Gene Protein (Rb)

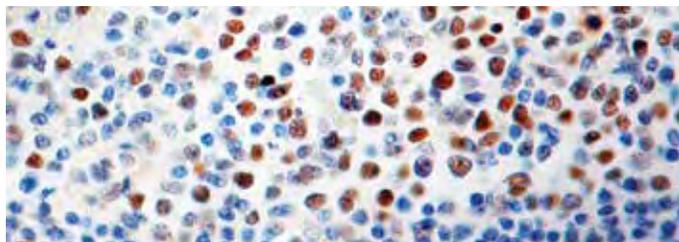
Clone: 1F8

Catalog No.: Mob 220 Concentrated 1ml

Mob 220-05 Concentrated 0.5ml

PDM 111 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Retinoblastoma antibody (Mob 220).

Immunogen: Recombinant human Rb protein.

Isotype: IgG1, kappa

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: This antibody recognizes human retinoblastoma gene protein. Rb gene, a prototype of tumor suppressor genes, has been associated with development and/or progression of bladder cancer as well as sarcoma and small cell lung cancer. Functional Rb gene loss has been reported to occur in bladder cancer and osteosarcoma. A significantly poorer tumor-free survival rate was noted for those patients who had a tumor with an altered Rb protein with or without vascular invasion.

F, P/H

Monoclonal Mouse Anti-Human

### Ret Oncoprotein

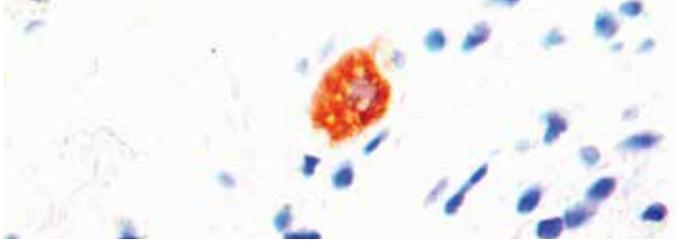
F, P/H

Clone: RET01 (same as 3F8)

Catalog No.: Mob 326 Concentrated 1ml

Mob 326-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human intestine stained with Ret Oncoprotein (Mob 326).

Immunogen: BALB/C mice were injected with recombinant protein encoding the extreme C-terminal cytoplasmic region of the human ret oncoprotein.

Isotype: IgG1

Positive Control: Small intestine

Cellular Localization: Cytoplasmic

Specificity: Ret proto-oncogene encodes a cell surface glycoprotein belonging to a member of the receptor tyrosine kinase family and is located on chromosome 10q11.2. Ret is observed in several regions of the central nervous system: in the developing cranial nerve ganglia, a subset of cells within dorsal root ganglia and in motor neurons in the spinal cord and hindbrain.

Monoclonal Mouse Anti-Human

### RPA/p34

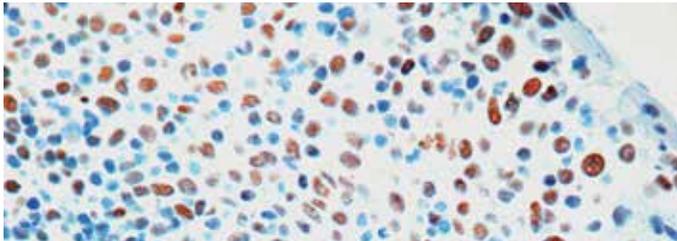
F, P/H

Clone: 9H8

Catalog No.: Mob 329 Concentrated 1ml

Mob 329-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with RPA antibody (Mob 329).

Immunogen: BALB/C mice were injected with purified human RPA protein.

Isotype: IgG1, kappa

Positive Control: Tonsil

Cellular Localization: Nuclear

Specificity: This antibody reacts with a 32-34 kDa protein known as replication protein A (RPA). RPA is involved in DNA replication, repair and recombination. Human RPA is a stable heterotrimer of 70 kDa, 32-34 kDa and 11-14 kDa subunits (RPA70, RPA32 and RPA14 respectively). RPA is required for the SV40 large tumor antigen-catalyzed unwinding for SV40 DNA and stimulates DNA polymerase  $\alpha$  and  $\delta$ .

Monoclonal Mouse Anti-Human

### S-100

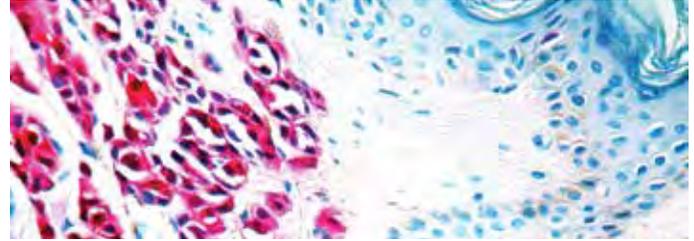
F, P/E

Clone: 4C4.9

Catalog No.: Mob 377 Concentrated 1ml

Mob 377-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with S100 antibody (Mob 377).

Immunogen: BALB/C mice were immunized with purified bovine brain S-100 protein

Isotype: IgG2a

Positive Control: Melanoma

Cellular Localization: Cytoplasmic

Specificity: This antibody stains with S-100 protein. S-100 belongs to the family of calcium binding proteins such as calmodulin and troponin C. S-100a and S-100b proteins are two members of the S-100 family. S-100a is composed of an  $\alpha$  and  $\beta$  chain whereas S-100b is composed of two  $\beta$  chains. This antibody stains schwannomas, ependymomas, astroglomas, almost all benign and malignant melanomas and their metastases.

Monoclonal Mouse Anti-Human

### S-100

F, P/E

Clone: SH-B1

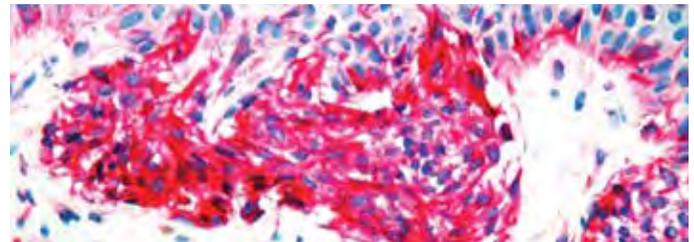
Catalog No.: Mob 111 Concentrated 1ml

Mob 111-05 Concentrated 0.5ml

PDM 088 Prediluted 6ml

PDM088-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with S-100 antibody (PDM 088).

Immunogen: Purified bovine brain S-100 $\beta$  preparation.

Isotype: IgG1

Positive Control: Melanoma

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific against an epitope located on the  $\beta$  chain (i.e. in S-100a and S-100b) but not on the  $\alpha$  chain of S-100 (i.e. in S-100a and S-100a $\alpha$ ). This antibody can be used to localize S-100a and S-100b in various tissue sections.



## Did you know?

Certain species of dandelion produce seeds asexually by a process called apomixis, where seeds of the plant are produced without the process of pollination. This results in younger plants having a genetic pattern consistent with the parent plant. Now that's quality assurance!

DBS maintains the highest quality standards with a commitment to service and support. This commitment is built on the strong foundation of our quality system. We are a registered FDA (FDA 21CFR Part 820) CDPH medical device manufacturer, certified ISO 9001:2000 and manufacture CE marked medical devices for use in the European market. ■

Polyclonal Rabbit Anti-Human

### S-100

F, P/E

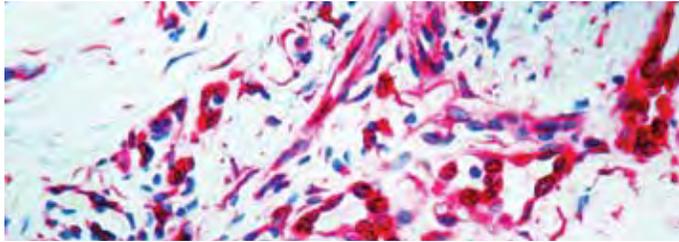
Catalog No.: RP 035 Concentrated 1ml

RP 035-05 Concentrated 0.5ml

PDR 008 Prediluted 6ml

PDR008-10RP Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human skin stained with S100 antibody. (PDR 008).

Immunogen: Affinity purified S-100 protein isolated from cow brain.

Positive Control: Melanoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with cow S-100 protein a and b. It shows strong cross-reactivity with human S-100 a and b. In the brain, it labels glial and ependymal cells. Melanocytes and Langerhans cells of the skin stain positive with this antibody.

Monoclonal Mouse Anti-Human

### Smooth Muscle Myosin (SMMS-1)

P/H



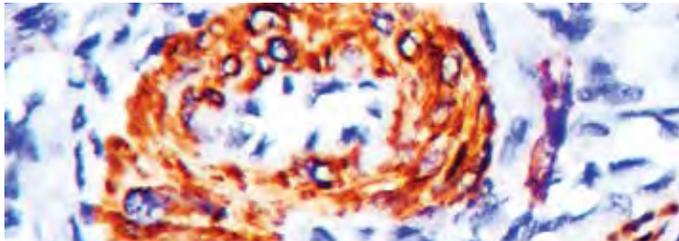
Clone: SMMS-1

Catalog No: Mob 467 Concentrated 1 ml

Mob 467-05 Concentrated 0.5 ml

PDM 175 Prediluted 6ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human uterus stained with SMMS antibody (Mob 467).

Immunogen: Human uterus smooth muscle extract

Isotype: IgG1

Positive Control: Colon, appendix

Cellular Localization: Cytoplasmic

Specificity: Monoclonal anti-smooth muscle myosin reacts with myosin heavy chain polypeptides of 200 and 204 kDa. It does not react with skeletal, cardiac, or non-muscle myosin. In immunohistochemistry it stains vascular and visceral smooth muscle cells and cells that have smooth muscle-like characteristics.

Polyclonal Rabbit Anti-Human

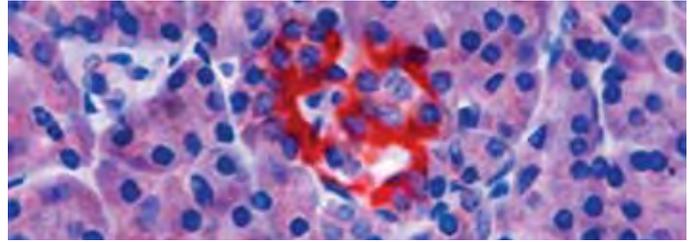
### Somatostatin Receptor

F, P/H

Catalog No.: RP 081 Concentrated 1ml

RP 081-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human pancreas stained with Somatostatin Receptor antibody (RP 081).

Immunogen: A synthetic peptide derived from the C-terminus of rat somatostatin protein.

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 60 kDa protein, known as somatostatin receptor. Somatostatin family of receptors has five members, sst1-sst5, as well as two isoforms of somatostatin receptor 2, sst2A and sst2B. They are coupled to G protein and are involved in regulation of numerous processes including secretion of insulin, glucagons and growth hormone and excitation of neurons in central and peripheral nervous system.

Monoclonal Rabbit Anti-Human

### Stat-5-Phospho

P/H

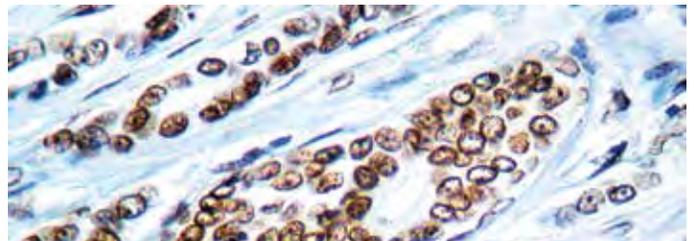


Clone: E208

Catalog No: RMPD 035 Prediluted 6ml

RMPD035-10RM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded breast carcinoma stained with Stat 5 phospho antibody (RMPD035).

Immunogen: A synthetic phospho-peptide corresponding to residues surrounding Tyr694 of human Stat5 was used as immunogen. The antibody only detects Stat5 phosphorylated on Tyrosine 694.

Isotype: IgG

Positive Control: Breast Carcinoma

Cellular Localization: Nucleus

Specificity: Signal transducer and activator of transcription 5 (Stat5) functions both in signal transduction and activation of transcription. It has been found that cytoplasmic Stat5 is translocated to the nucleus in response to phosphorylation. Stat5 is tyrosine phosphorylated in response to IL-2, IL-3, IL-7, IL-15, GM-CSF, growth hormone, prolactin, erythropoietin and thrombopoietin. Tyrosine phosphorylation is required for DNA binding activity and dimerization. Serine phosphorylation is also required for maximal transcriptional activity. NCoA-1/SRC-1 acts as a coactivator for both the  $\alpha$ - and  $\beta$ -isoforms of Stat5.

Polyclonal Rabbit Anti-Human

### Survivin

F, P/H

Catalog No.: RP 068 Concentrated 1ml

RP 068-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: A synthetic peptide derived from the C-terminal region of survivin.

Positive Control: Stomach

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 16.5 kDa protein, known as survivin. Survivin is an inhibitor of apoptosis proteins. It is expressed in the G2/M phase of the cell cycle in a cycle-regulated manner. At the beginning of mitosis, survivin associates with microtubules of the mitotic spindle. Disruption of survivin-microtubule interactions results in loss of survivin's anti-apoptotic function and increased caspase-3 activity.

Monoclonal Mouse Anti-Human

### Synaptophysin

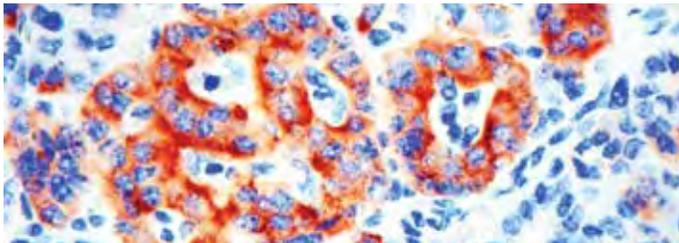
F, P/H

Clone: SYP02

Catalog No.: Mob 399 Concentrated 1ml

Mob 399-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human pancreas stained with Synaptophysin antibody (Mob 399).

Immunogen: BALB/C mice were injected with a synthetic peptide encoding a region near the C-terminal end of the synaptophysin protein.

Isotype: IgG1

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to a 38 kDa protein. Synaptophysin is a glycoprotein occurring in presynaptic vesicles of neurons in the brain, spinal cord, retina, vesicles of adrenal medulla and in neuromuscular junctions. This antibody reacts with neuroendocrine neoplasms of neural as well as epithelial types.

Polyclonal Rabbit Anti-Human

### Synaptophysin

F, P/H

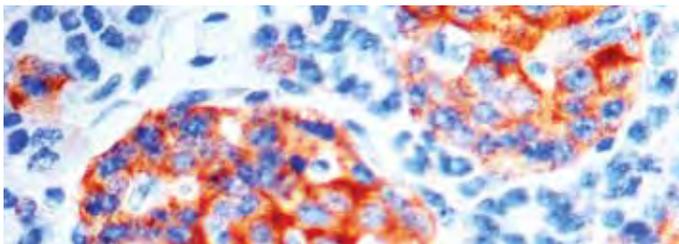
Catalog No.: RP 036 Concentrated 1ml

RP 036-05 Concentrated 0.5ml

PDR 009 Prediluted 6ml

PDR009-10RP Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human pancreas stained with Synaptophysin antibody (RP 036).

Immunogen: Synthetic human synaptophysin coupled to keyhole limpet hemocyanin.

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a hydrophilic peptide of 38 kDa. The antibody stains neuroendocrine cells of adrenal medulla, carotid body, skin, pituitary gland, lung, and pancreas.

Monoclonal Rabbit Anti-Human

### Synaptophysin

F, P/H

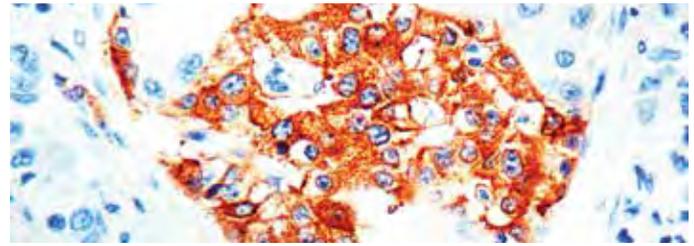
Clone: SP11

Catalog No.: RMAB 018 Concentrated 0.5ml

RMPD 018 Prediluted 6ml

RMPD018-10RM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded human pancreas stained with Synaptophysin antibody (RMAB 018).

Immunogen: A synthetic peptide of human synaptophysin.

Isotype: IgG

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes a protein of 38kDa, identified as synaptophysin. It labels normal neuroendocrine cells of human adrenal medulla, carotid body, skin, pituitary gland, thyroid, lung, pancreas, gastrointestinal mucosa, Paneth's cells in the gastrointestinal tract and gastric parietal cells. Neurons in the brain, spinal cord, and retina are also labeled. In combination with anti-chromogranin A and anti-NSE, anti-synaptophysin is very useful in the identification of normal neuroendocrine cells and neuroendocrine neoplasms.

Polyclonal Rabbit Anti-Human

### Synuclein, Pan

F, P/H

Catalog No.: RP 131 Concentrated 1ml

RP 131-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: A synthetic peptide derived from near N-terminal of human  $\alpha$ ,  $\beta$  and  $\gamma$  synuclein proteins.

Positive Control: Brain

Cellular Localization: Neuronal cytosol and presynaptic terminals

Specificity: Synucleins are small, soluble proteins expressed primarily in neural tissue and in certain tumors. The family includes three known proteins:  $\alpha$ ,  $\beta$  and  $\gamma$  synucleins. The  $\alpha$ - and  $\beta$  synuclein proteins are found primarily in brain tissue, where they are seen mainly in presynaptic terminals. The  $\gamma$  synuclein protein is found primarily in the peripheral nervous system and retina but its expression in breast tumors is a marker for tumor progression.

Monoclonal Mouse Anti-Human

### TAG-72/CA 72-4

F, P/H

Clone: B72.3

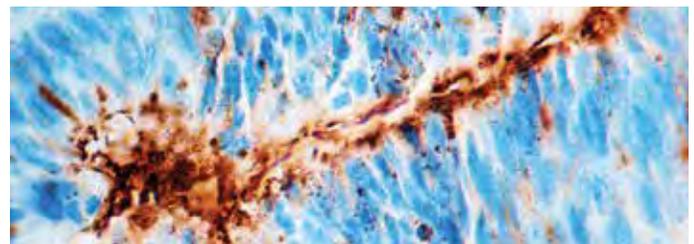
Catalog No.: Mob 288 Concentrated 1ml

Mob 288-05 Concentrated 0.5ml

PDM 100 Prediluted 6ml

PDM100-10MM Prediluted 10ml 360

Regulatory Status: IVD



Formalin fixed paraffin embedded colon carcinoma stained with TAG72 antibody (Mob 288).

Immunogen: BALB/C mice were injected with membrane enriched fraction of a human breast carcinoma liver metastasis.

Isotype: IgG1, kappa

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic, cell surface

Specificity: This antibody is specific to an oncofetal antigen of >1,000 kDa known as tumor associated glycoprotein (TAG-72) or CA 72-4. This antibody defines the mucin carried sialylated-Tn antigen. This antibody stains the majority of human adenocarcinomas including colorectal, pancreatic, gastric, ovarian, endometrial, mammary and non-small cell lung cancer.

Monoclonal Mouse Anti-Human

### TAG-72/CA 72-4

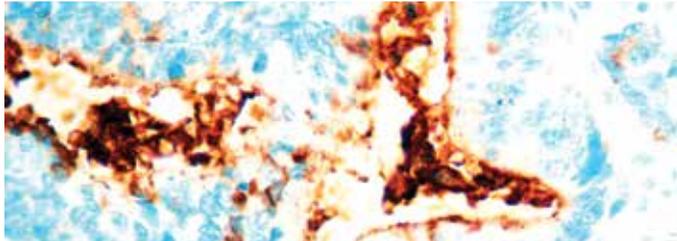
Clone: CC49

Catalog No.: Mob 289 Concentrated 1ml

Mob 289-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P/H



Formalin fixed paraffin embedded colon carcinoma stained with TAG72 antibody (Mob 289).

Immunogen: BALB/C mice were injected with purified TAG-72 protein.

Isotype: IgG1

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasm, cell surface

Specificity: This antibody is specific to an oncofetal antigen of >1,000 kDa known as tumor associated glycoprotein (TAG-72) or CA 72-4. This antibody has been shown to be distinct from B72.3 by reciprocal competition radio-immunoassays and it has a Ka higher than that of B72.3. TAG-72 is expressed in colon, breast, pancreatic, ovarian, lung and gastric cancer.

Monoclonal Mouse Anti-Human

### T Cell, CD45RO

Clone: UCHL1

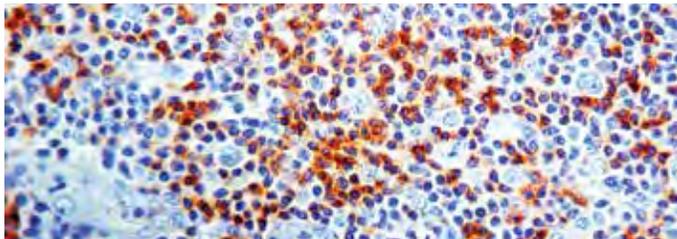
Catalog No.: Mob 043 Concentrated 1ml

Mob 043-05 Concentrated 0.5ml

PDM 015 Prediluted 6ml

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded human tonsil stained with CD45RO antibody (Mob 043).

Immunogen: BALB/C mice were immunized with IL-2 dependent T cell line, CA1.

Isotype: IgG2a, kappa

Positive Control: Tonsil

Cellular Localization: Cell membrane

Specificity: This antibody reacts with a 180 kDa glycoprotein of CD45 family, occurring on most thymocytes and activated T cells but only on a portion of the resting T cells. It reacts with most thymocytes, a subpopulation of resting cells within both the CD4 and CD8 subsets and mature activated T cells.

Monoclonal Mouse Anti-Human

### Tau, Neurofibrillary Tangles Marker

Clone: TAU-5 (same as TAU-2)

Catalog No.: Mob 283 Concentrated 1ml

Mob 283-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with purified bovine microtubule-associated proteins.

Isotype: IgG1

Positive Control: Alzheimer brain

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 45-68 kDa proteins identified as tau proteins. This antibody does not cross-react with tubulin or other microtubule associated proteins. This antibody reacts with phosphorylated as well as non-phosphorylated forms of tau. Its epitope maps in the middle of tau. This antibody stains human neurofibrillary tangles, neuropil threads and neurotic plaques associated with Alzheimer's disease.

F, P/H

Monoclonal Mouse Anti-Human

### Terminal Deoxynucleotidyl Transferase (Tdt)

Clone: SEN28

Catalog No.: Mob 097-1 Concentrated 1ml

Mob 097-1-05 Concentrated 0.5ml

PDM 096 Prediluted 6ml

PDM096-10MM Prediluted 10ml 3 6 0

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with Tdt.

Isotype: IgG2a, kappa

Positive Control: Thymus

Cellular Localization: Nuclear

Specificity: This antibody stains a 60kDa peptide in human lymphoblasts. Tdt is present in the cells during immunoglobulin gene rearrangement and plays an important role in lymphocyte maturation. Tdt marks both T and B immature lymphocytes normally found in thymus and bone marrow.

F, P/H

Monoclonal Mouse Anti-Human

### Thrombospondin (TSP)

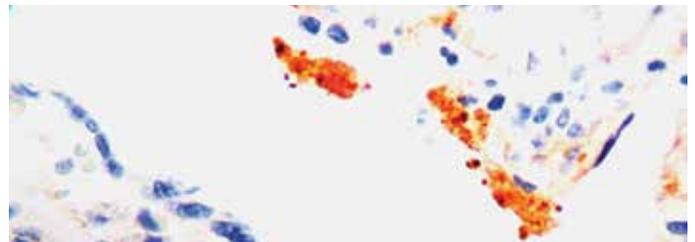
Clone: A6.1

Catalog No.: Mob 315 Concentrated 1ml

Mob 315-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P/H



Formalin fixed paraffin embedded human placenta stained with Thrombospondin antibody (Mob 315).

Immunogen: BALB/C mice were injected with reduced and alkylated purified human TSP (fully denatured) from the supernatant of thrombin-activated platelets.

Isotype: IgG1

Positive Control: Tonsil

Cellular Localization: Secretory granules, Golgi complex, endoplasmic reticulum

Specificity: This antibody is specific to 450 kDa (non-reduced) and 170 to 180 kD (reduced) form of thrombospondin. Thrombospondin is a protein from platelet a granules. It is secreted at sites of platelet activation and aggregation and is involved in the differentiation of leukocytes, fibroblasts, smooth muscle and endothelial cells.

Monoclonal Mouse Anti-Human

### Thymidine Phosphorylase/Platelet-Derived Endothelial Cell Growth Factor

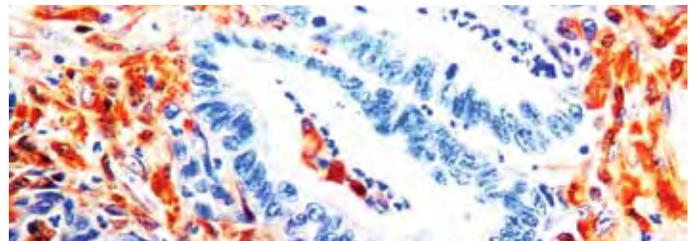
Clone: P-GF.44C

Catalog No.: Mob 292 Concentrated 1ml

Mob 292-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded colon carcinoma stained with Thymidine phosphorylase antibody (Mob 292).

Immunogen: BALB/C mice were injected with a recombinant full length human thymidine phosphorylase (TP/PD-ECGF) protein.

Isotype: IgG1

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic, Nuclear

Specificity: This antibody is specific to a 55 kDa protein known as platelet-derived endothelial growth factor (PD-ECGF), or thymidine phosphorylase (TP). High levels of TP/PD-ECGF are observed in cancer patients. High intracellular levels of TP/PD-ECGF are associated with increased sensitivity to fluoropyrimidine chemotherapeutic agents.

Monoclonal Mouse Anti-Human

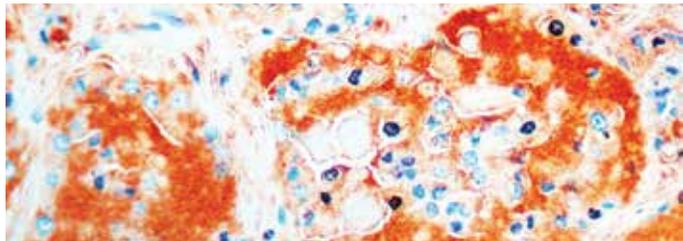
### Thyroglobulin

Clone: 1D4

Catalog No.: Mob 223 Concentrated 1ml  
Mob 223-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded thyroid stained with thyroglobulin antibody (Mob 223).

Immunogen: BALB/C mice were immunized with purified human thyroglobulin.

Isotype: IgG2a

Positive Control: Thyroid

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes thyroglobulin in hyperplastic and neoplastic thyroid. Thyroglobulin is a protein of 670 kDa consisting of two identical subunits. Thyroglobulin is synthesized by the follicular epithelial cells of the thyroid.

Monoclonal Mouse Anti-Human

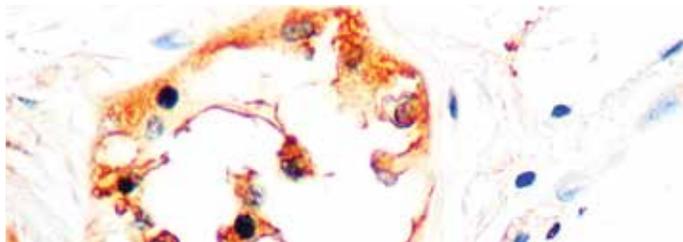
### Thyroglobulin

Clone: RBU/01

Catalog No.: Mob 398-1 Concentrated 1ml  
Mob 398-1-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded human thyroid stained with thyroglobulin antibody (Mob 398-1).

Immunogen: BALB/C mice were injected with purified human thyroglobulin.

Isotype: IgG1

Positive Control: Thyroid

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 330 kDa protein. Thyroglobulin is synthesized by the follicular epithelial cells of the thyroid. Thyroglobulin antibody has been useful in the positive identification of thyroid carcinomas of the papillary and follicular types. It stains thyroglobulin in adenoma from thyroid (microfollicles).

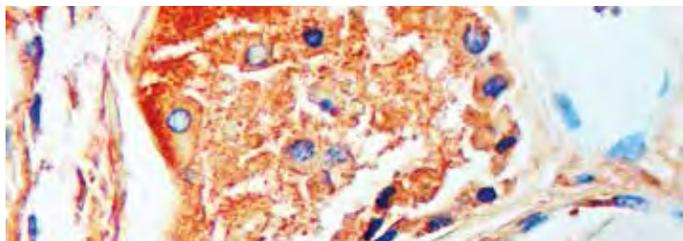
Polyclonal Rabbit Anti-Human

### Thyroglobulin

Catalog No.: RP 059 Concentrated 1ml  
RP 059-05 Concentrated 0.5ml  
PDR 041 Prediluted 6ml  
PDR 041-PV Prediluted 6ml

Regulatory Status: IVD

F, P



Formalin fixed paraffin embedded human thyroid stained with thyroglobulin antibody (RP 059).

Immunogen: Thyroglobulin isolated from human thyroid glands.

Positive Control: Thyroid

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with human thyroglobulin-containing cells in thyroid.

Monoclonal Mouse Anti-Human

### Thyroglobulin

Clone: DAK-Tg6

Catalog No.: Mob 089 Concentrated 1ml  
Mob 089-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P

Immunogen: BALB/C mice were injected with purified human thyroglobulin.

Isotype: IgG2a, kappa

Positive Control: Thyroid

Cellular Localization: Cytoplasm

Specificity: This antibody reacts with a 300 kDa protein in immunoblotting. It stains cells in normal, hyperplastic and neoplastic thyroids.

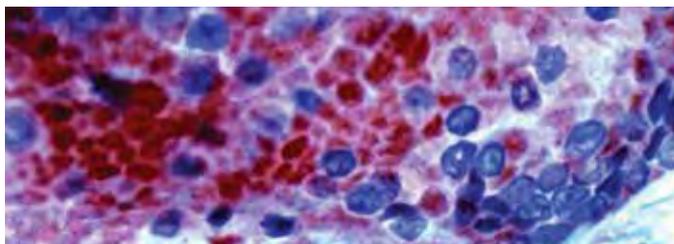
Polyclonal Rabbit Anti-Human

### Thyroid Hormone Receptor ( $\alpha 1/\alpha 2$ )

F, P/H

Catalog No.: RP 149 Concentrated 1ml  
RP 149-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human colon carcinoma stained with THR  $\alpha 1/\alpha 2$  antibody (RP 149).

Immunogen: A synthetic peptide derived from aa 13-32 of human TR- $\alpha$  protein.

Positive Control: Colon carcinoma

Cellular Localization: Nuclear

Specificity: Thyroid hormone receptors (TR) are ligand dependent members of the steroid/retinoic acid superfamily of transcription factors. The two genes encoding TR identified to date, TR  $\alpha$  and TR  $\beta$ , have been mapped to human chromosomes 17 and 3, respectively. TR bind to thyroid hormone response elements (TRE) with half site binding motifs in the orientation of palindromes, direct repeats, or inverted palindromes. The affinities of binding are both variable and influenced differentially by 3,5,3'-triiodo-L-thyronine (T-3).

Monoclonal Mouse Anti-Human

### Thyroid Peroxidase

Clone: MoAb47

Catalog No.: Mob 418 Concentrated 1ml  
Mob 418-05 Concentrated 0.5ml

Regulatory Status: IVD

F, P/H

Immunogen: Human thyroid peroxidase (hTPO) purified from thyroid microsomes by immunoaffinity chromatography.

Isotype: IgG1

Positive Control: Thyroid

Cellular Localization: Cytoplasmic

Specificity: Thyroid peroxidase (TPO) is a transmembrane protein of 107kDa containing a heme prosthetic group. It is present as a dimer on the apical surface of thyroid follicular cells. TPO is the primary enzyme involved in thyroid hormone synthesis. Malignant thyroid tumors exhibit an anomaly in TPO resulting in lower affinity for anti-TPO. This antibody may aid in the differentiation between benign and malignant thyroid tumors.

Monoclonal Mouse Anti-Human

### Thyroid Transcription Factor-1 (TTF-1), Thyroid and Lung Epithelial Marker

F, P/H

Clone: 8G7G3/1

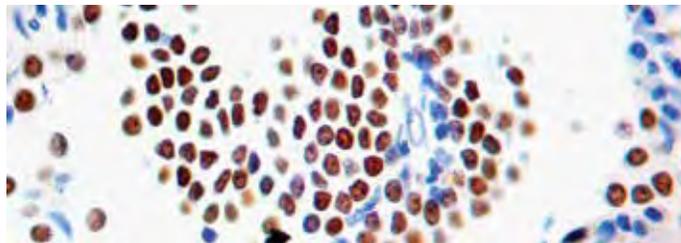
Catalog No.: Mob 285 Concentrated 1ml

Mob 285-05 Concentrated 0.5ml

PDM 104 Prediluted 6ml

PDM104-10MM Prediluted 10ml **360**

Regulatory Status: IVD



Formalin fixed paraffin embedded lung adenocarcinoma stained with TTF1 (Mob 285).

Immunogen: BALB/C mice were injected with a recombinant rat protein.

Isotype: IgG1

Positive Control: Lung

Cellular Localization: Nuclear

Specificity: This antibody is specific to a 40 kDa protein, which is identified as thyroid transcription factor (TTF-1). TTF-1 is expressed in epithelial cells of the thyroid gland and lung. TTF-1 stains primary lung adenocarcinoma and small cell carcinoma but does not stain colon and breast carcinoma.

Monoclonal Mouse Anti-Human

### TIMP-1

F, P/H

Clone: 102D1

Catalog No.: Mob 317 Concentrated 1ml

Mob 317-05 Concentrated 0.5ml

Regulatory Status: RUO

Immunogen: BALB/C mice were injected with recombinant human TIMP-1.

Isotype: IgG1

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 28.5 kDa protein known as TIMP-1. Tissue inhibitor of metalloproteinases-1 (TIMP-1) and tissue inhibitor of metalloproteinases-2 (TIMP-2) are inhibitory enzymes of matrix metalloproteinase family. TIMP-1 forms a complex of 1:1 stoichiometry with activated interstitial collagenase, activated stromelysin, active form of 72 kDa type IV collagenase (MMP-2) and latent and active forms 92 kDa Type IV collagenase (MMP-9). TIMPs inhibit the proteolytic invasiveness of tumor cells and normal placental trophoblast cells.

Monoclonal Mouse Anti-Human

### TIMP-2

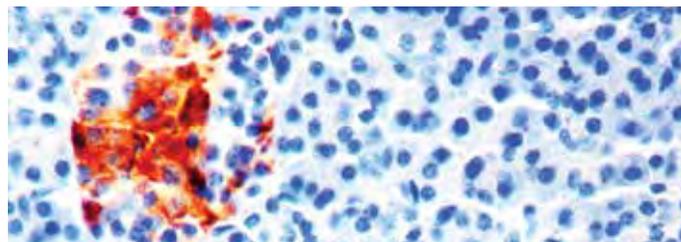
F, P/H

Clone: 3A4

Catalog No.: Mob 318 Concentrated 1ml

Mob 318-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human pancreas stained with TIMP2 antibody. (Mob 318).

Immunogen: BALB/C mice were injected with a synthetic peptide from the N-terminal region of human TIMP-2.

Isotype: IgG2a, kappa

Positive Control: Colon carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to 21 kDa protein known as TIMP-2. TIMP-1 and TIMP-2 are inhibitory enzymes of matrix metalloproteinase family. TIMP are of great importance in the maintenance of connective tissue integrity. TIMP-2 shows the highest binding affinity to both the latent (pro) and active forms of 72 kDa Type IV collagenase (MMP-2) and active form of 92 kDa type IV collagenase (MMP-9). TIMP inhibit the proteolytic invasiveness of tumor cells and normal placental trophoblast cells.

Polyclonal Rabbit Anti-Human

### TIMP-3

F, P/H

Catalog No.: RP 072 Concentrated 1ml

RP 072-05 Concentrated 0.5ml

Regulatory Status: RUO

Immunogen: A synthetic peptide derived from the C-terminus region of the human TIMP-3.

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 23kDa protein, known as TIMP-3. TIMP form tight inhibitory complexes with MMP, which are involved in matrix degradation and in tumor invasiveness and metastasis. TIMP inhibit the proteolytic invasiveness of tumor cells and normal placental trophoblast cells.

Polyclonal Rabbit Anti-Human

### TIMP-4

F, P/H

Catalog No.: RP 073 Concentrated 1ml

RP 073-05 Concentrated 0.5ml

Regulatory Status: RUO

Immunogen: A synthetic peptide derived from the C-terminus region of the human TIMP-4.

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 23kDa protein, known as TIMP-4. TIMP form tight inhibitory complexes with MMP, which are involved in matrix degradation and in tumor invasiveness and metastasis. TIMP inhibit the proteolytic invasiveness of tumor cells and normal placental trophoblast cells.

Polyclonal Rabbit Anti-Human

### Transferrin

F, P/H

Catalog No.: RP 061 Concentrated 1ml

RP 061-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Transferrin isolated from human plasma.

Positive Control: Liver

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with human transferrin. It stains hepatocytes in fetal liver, epithelial cells of colon adenocarcinoma, and cells of normal liver.

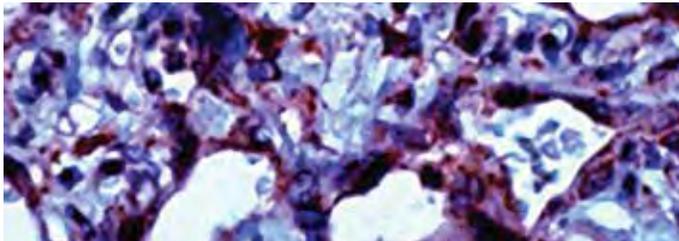
Polyclonal Rabbit Anti-Human

### Transforming Growth Factor $\beta$ 3 (TGF $\beta$ 3)

F, P/H

Catalog No.: RP 148 Concentrated 1ml  
RP 148-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human placenta stained with TGF $\beta$ 3 antibody (RP 148).

Immunogen: A synthetic peptide derived from the C-terminal of the precursor form of human TGF $\beta$ 3 protein.

Positive Control: Placenta

Cellular Localization: Cytoplasmic

Specificity: Transforming growth factor  $\beta$  (TGF $\beta$ ) mediate many cell-cell interactions that occur during embryonic development. Three TGF $\beta$  have been identified in mammals. TGF $\beta$ 1, TGF $\beta$ 2 and TGF $\beta$ 3 are each synthesized as precursor proteins that are very similar. Each is cleaved to yield a 112 amino acid polypeptide that remains associated with the latent portion of the molecule. This antibody does not cross-react with TGF $\beta$ 1 or TGF $\beta$ 2.

Monoclonal Mouse Anti-Human

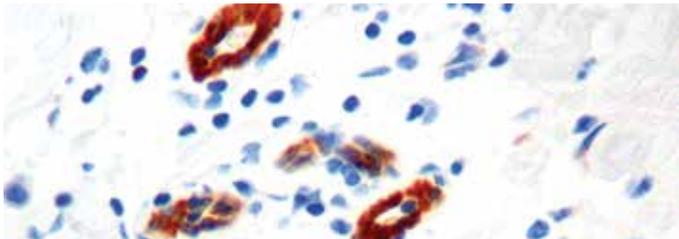
### Transglutaminase II

F, P/H

Clone: CUB 7402

Catalog No.: Mob 353 Concentrated 1ml  
Mob 353-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded breast carcinoma stained with Transglutaminase II antibody (Mob 353).

Immunogen: BALB/C mice were injected with purified guinea pig liver transglutaminase.

Isotype: IgG1

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic, cell membrane, extracellular matrix

Specificity: This antibody reacts with a 77-85 kDa protein known as transglutaminase II (TGase II). TGase II catalyzes calcium-dependent post-translational modification of proteins by formation of an isopeptide bond within or between polypeptide chains. Different tissue and cell types express varying amounts of tissue transglutaminase.

Monoclonal Mouse Anti-Human

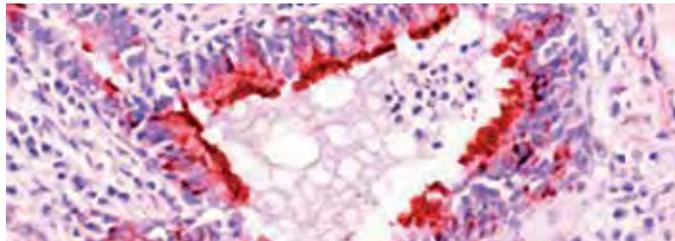
### Tubulin- $\alpha$

F, P

Clone: DM1A

Catalog No.: Mob 286 Concentrated 1ml  
Mob 286-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human lung stained with Tubulin  $\alpha$  antibody (Mob 286).

Immunogen: BALB/C mice were immunized with native chick brain microtubules.

Isotype: IgG1, kappa

Positive Control: Lung

Cellular localization: Cytoplasmic

Specificity: This antibody is specific to a 57 kDa protein identified as tubulin- $\alpha$ . This antibody does not cross-react with tubulin- $\beta$ . Its epitope maps between amino acids 426-450.

Monoclonal Mouse Anti-Human

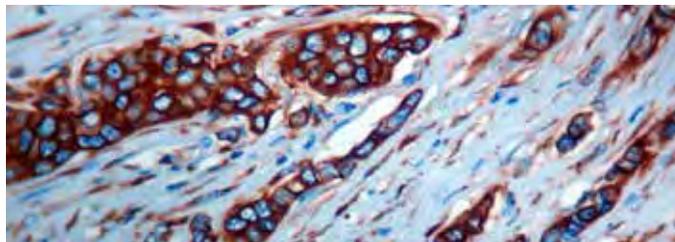
### Tubulin- $\beta$

F, P

Clone: 2-28-33

Catalog No.: Mob 287-1 Concentrated 1ml  
Mob 287-1-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded breast carcinoma stained with Tubulin  $\beta$  (Mob 287-1).

Immunogen: Beta Tubulin isolated from Sarkosyl-resistant ribbons from Strongylocentrotus purpuratus (Sea urchin) sperm axonemes.

Isotype: IgG1, kappa

Positive Control: Breast carcinoma

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to a 50 kDa protein identified as tubulin-beta. This antibody does not cross react with tubulin-alpha.

Monoclonal Mouse Anti-Human

### Tumor Necrosis Factor- $\alpha$ (TNF- $\alpha$ )

F, P

Clone: 68B6A3

Catalog No.: Mob 314-1 Concentrated 1ml  
Mob 314-1-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: BALB/C mice were injected with recombinant human TNF- $\alpha$ .

Isotype: IgG1

Positive Control: Skin, lung

Cellular Localization: Cytoplasmic, extracellular

Specificity: This antibody is specific to a 17 kDa protein. Tumor necrosis factor alpha (TNF- $\alpha$ ) is a macrophage/monocyte cytokine. It is usually found as a soluble secreted protein. TNF- $\alpha$  has diverse immunomodulatory, anti-tumor and toxic effects.

Monoclonal Mouse Anti-Human

**Tumor Necrosis Factor- $\alpha$  (TNF- $\alpha$ )** F, P/H

Clone: 28401.111

Catalog No.: Mob 458 Concentrated 1ml

Mob 458-05 Concentrated 0.5ml

Regulatory Status: IVD

Immunogen: Purified recombinant human tumor necrosis factor- $\alpha$ .

Isotype: IgG1

Positive Control: Spleen

Cellular Localization: Cell membrane, extracellular

Specificity: Tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ), also called cachectin, is a member of the TNF superfamily of cytokines. TNF- $\alpha$  is expressed as a 26 kDa membrane bound protein. It is cleaved by TNF- $\alpha$  converting enzyme (TACE) to release the soluble 17 kDa monomer, which forms homotrimers in circulation. The antibody does not cross-react with recombinant human TNF- $\alpha$ , TNF sRI, TNF sRII, nor with recombinant mouse TNF- $\alpha$ .

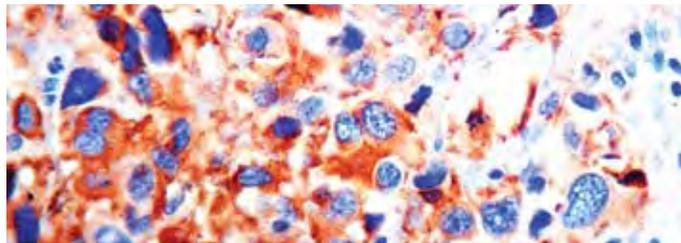
Polyclonal Rabbit Anti-Human

**Tyrosinase, Melanoma Marker** F, P/H

Catalog No.: RP 132 Concentrated 1ml

RP 132-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human melanoma stained with Tyrosinase antibody (RP 132).

Immunogen: Recombinant human tyrosinase protein.

Positive Control: Melanoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with 70-80 kDa protein. Tyrosinase is a copper containing metalloprotein that catalyzes several steps in the melanin pigment biosynthetic pathway. Tyrosinase and melan A are the most commonly expressed melanoma markers and are found in approximately 80 to 100% of cases. This antibody is helpful in the identification of melanocytic tumors.

Monoclonal Mouse Anti-Human

**Tyrosinase, Melanoma Marker**

F, P/H

Clone: T311

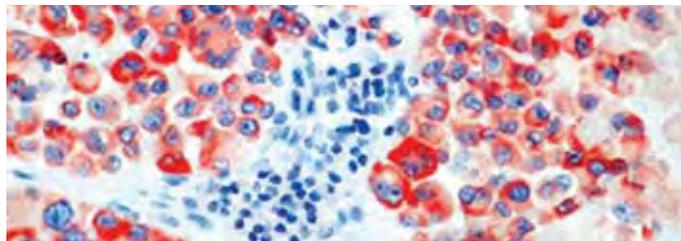
Catalog No.: Mob 290 Concentrated 1ml

Mob 290-05 Concentrated 0.5ml

PDM 150 Prediluted 6ml

PDM150-10MM Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human melanoma stained with Tyrosinase antibody (Mob 290).

Immunogen: BALB/C mice were injected with a recombinant tyrosinase protein.

Isotype: IgG2a

Positive Control: Melanoma

Cellular Localization: Cytoplasmic

Specificity: This antibody is specific to a cluster of proteins between 70-80 kDa known as tyrosinase. This antibody does not show any cross-reaction with MAGE-1 and tyrosinase-related protein-1, TRP-1/gp75. Staining of melanomas with this antibody showed tyrosinase in melanotic as well as amelanotic variants.

Monoclonal Mouse Anti-Human

**Ubiquitin**

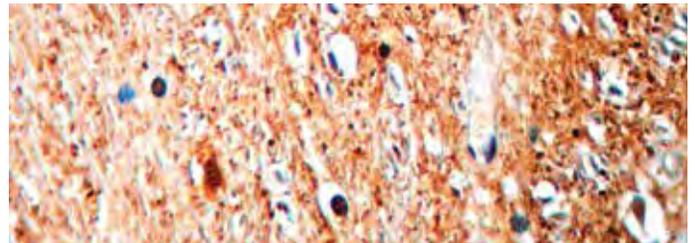
F, P

Clone: FPM1

Catalog No.: Mob 225 Concentrated 1ml

Mob 225-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human brain stained with ubiquitin antibody (Mob 225).

Immunogen: BALB/C mice were immunized with purified human ubiquitin.

Isotype: IgG1

Positive Control: Alzheimer brain

Cellular Localization: Nuclear, cytoplasmic and cell membrane

Specificity: This antibody recognizes neurofibrillary tangles in Alzheimer's disease, Lewy bodies in Lewy body disease, Rosenthal fibers in astrocytomas and Mallory bodies in alcoholic liver disease. It stains dot-like structures in the white matter of normal aging brain.

Polyclonal Rabbit Anti-Human

**Ubiquitin**

F, P

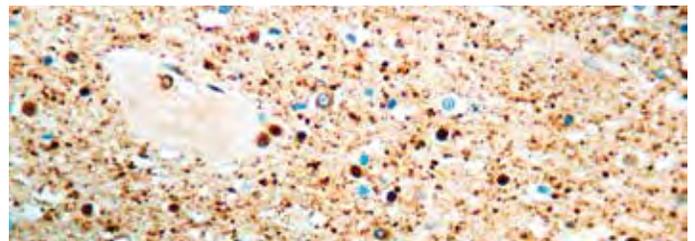
Catalog No.: RP 040 Concentrated 1ml

RP 040-05 Concentrated 0.5ml

PDR 010 Prediluted 6ml

PDR010-10RP Prediluted 10ml 3 6 0

Regulatory Status: IVD



Formalin fixed paraffin embedded human brain stained with ubiquitin antibody (RP 040).

Immunogen: Ubiquitin isolated from cow erythrocytes and conjugated to chicken gamma globulins.

Positive Control: Alzheimer brain

Cellular Localization: Cytoplasmic, cell membrane

Specificity: This antibody reacts with ubiquitin from human and several other mammalian species. It reacts with the periphery of senile plaques and neurofibrillary tangles in Alzheimer's disease.

Monoclonal Mouse Anti-Human

### Vascular Endothelial Growth Factor (VEGF) **F, P/H**

Clone: VG1

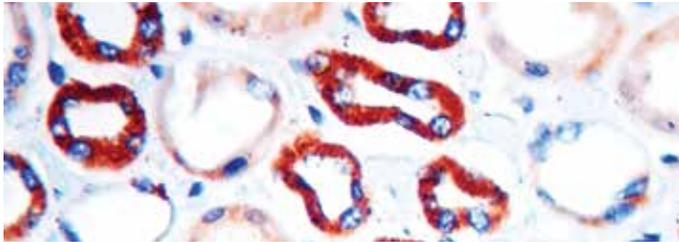
Catalog No.: Mob 308 Concentrated 1ml

Mob 308-05 Concentrated 0.5ml

PDM 165 Prediluted 6ml

**PDM165-10MM Prediluted 10ml 360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human kidney stained with VEGF antibody (Mob 308).

Immunogen: BALB/C mice were injected with a recombinant VEGF protein.

Isotype: IgG1, kappa

Positive Control: Angiosarcoma

Cellular Localization: Cytoplasmic, cell membrane, extracellular matrix

Specificity: This antibody is specific to a cluster of proteins between 19-22 kDa (reduced). VEGF is a homodimeric disulfide-linked glycoprotein involved in angiogenesis, which promotes tumor progression and metastasis. It exhibits potent mitogenic and permeability-inducing properties specific for the vascular endothelium.

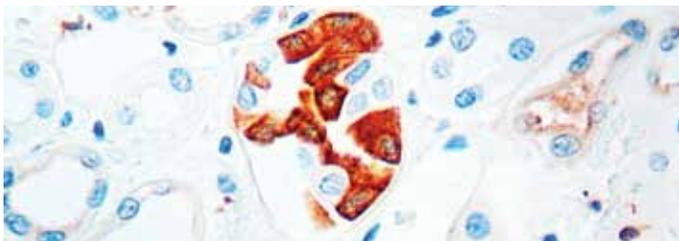
Polyclonal Rabbit Anti-Human

### Vascular Endothelial Growth Factor (VEGF) **F, P/H**

Catalog No.: RP 121 Concentrated 1ml

RP 121-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human kidney stained with VEGF antibody (RP 121).

Immunogen: A synthetic peptide from N-terminus of human VEGF.

Positive Control: Angiosarcoma

Cellular Localization: Cytoplasmic, cell membrane, extracellular matrix

Specificity: This antibody reacts with a 19-22 kDa (reduced) protein. Vascular endothelial growth factor (VEGF) is a homodimeric, disulfide-linked glycoprotein involved in angiogenesis which promotes tumor progression and metastasis. This antibody reacts with 165, 189 and 121 amino acid splice variants of human VEGF.

Monoclonal Rabbit Anti-Human

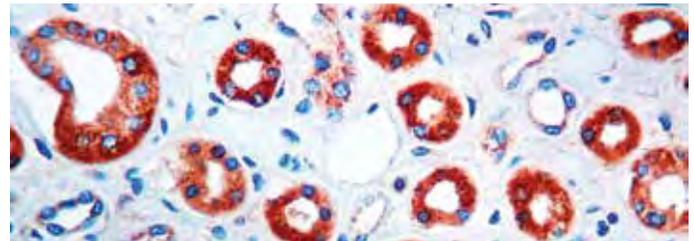
### Vascular Endothelial Growth Factor (VEGF) **F, P/H**

Clone: SP28

Catalog No.: RMPD 021 Prediluted 6ml

**RMPD021-10RM Prediluted 10ml 360**

Regulatory Status: IVD



Formalin fixed paraffin embedded human kidney stained with VEGF antibody (RMPD 021).

Immunogen: A synthetic peptide from N-terminus of human VEGF protein.

Isotype: IgG

Positive Control: Angiosarcoma

Cellular Localization: Cytoplasmic, cell surface

Specificity: This VEGF antibody is a homodimeric, disulfide-linked glycoprotein involved in angiogenesis which promotes tumor progression and metastasis. This antibody reacts with the 165, 189 and 121 amino acid splice variants of human VEGF.

Monoclonal Mouse Anti-Human

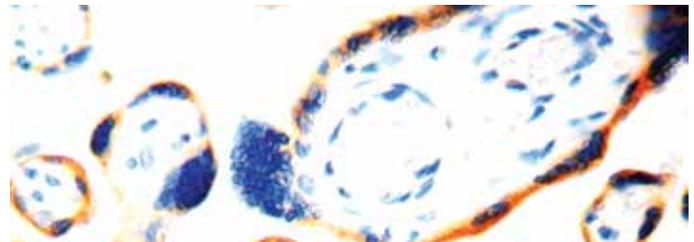
### VEGFR-1/Flt-1 Receptor **F, P/H**

Clone: FLT-11

Catalog No.: Mob 457 Concentrated 1 ml

Mob 457-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human placenta stained with VEGFR1 antibody (Mob 457).

Immunogen: Human recombinant extracellular domain of VEGF receptor-1.

Isotype: IgG1

Positive Control: Angiosarcoma

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts specifically with the extracellular domain of human VEGF Receptor-1 (Flt1 Receptor). The epitope recognized by the antibody resides within amino acid residues 1-251 of the VEGF Receptor-1 molecule. This antibody does not recognize VEGF Receptor-2 (KDR).

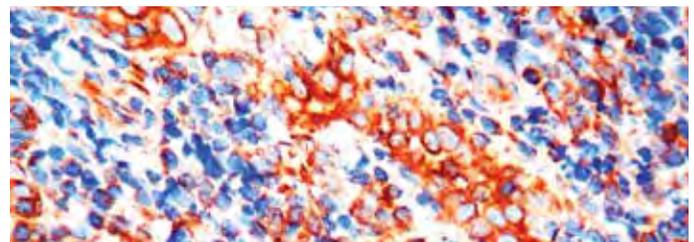
Polyclonal Rabbit Anti-Human

### Vimentin **F, P**

Catalog No.: RP 115 Concentrated 1ml

RP 115-05 Concentrated 0.5ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Vimentin antibody (RP 115).

Immunogen: Recombinant human vimentin protein.

Positive Control: Sarcomas, melanomas, tonsil

Cellular Localization: Cytoplasmic

Specificity: This antibody reacts with a 57- 60 kDa protein. Vimentin is the main intermediate filament protein in mesenchymal cells and therefore is of value in the differential diagnosis of undifferentiated neoplasms.

Monoclonal Rabbit Anti-Human

**Vimentin**

Clone: SP20

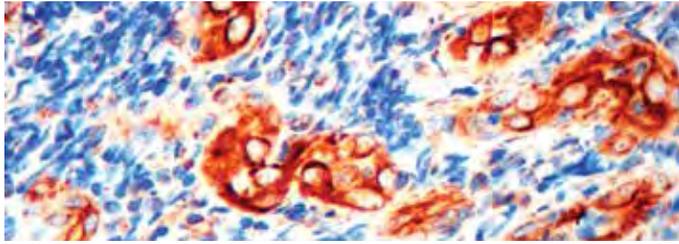
Catalog No.: RMAB 019 Concentrated 0.5ml

RMPD 019 Prediluted 6ml

RMPD019-10RM Prediluted 10ml **360**

F, P

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Vimentin antibody (RMAB 019).

Immunogen: Recombinant human vimentin protein.

Isotype: IgG

Positive Control: Sarcomas

Cellular Localization: Cytoplasmic

Specificity: This antibody recognizes vimentin. Vimentin is the main intermediate filament protein in mesenchymal cells and is therefore of value in the differential diagnosis of undifferentiated neoplasms.

Monoclonal Mouse Anti-Human

**Vimentin, Porcine**

Clone: V9

Catalog No.: Mob 090 Concentrated 1ml

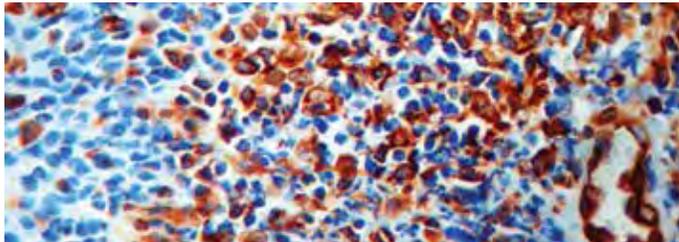
Mob 090-05 Concentrated 0.5ml

PDM 029 Prediluted 6ml

PDM029-10MM Prediluted 10ml **360**

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with Vimentin antibody (PDM 029).

Immunogen: BALB/C mice were injected with purified vimentin from porcine eye lens.

Isotype: IgG1, kappa

Positive Control: Sarcoma, tonsil

Cellular Localization: Cytoplasm

Specificity: This antibody reacts with the 57 kDa intermediate filament protein present in the cells of mesenchymal origin. The antibody does not show any cross-reactivity with other intermediate filament proteins. However, it shows a broad interspecies cross-reactivity.

Monoclonal Mouse Anti-Human

**Wilms Tumor 1 Protein (WT1)**

Clone: 6F-H2

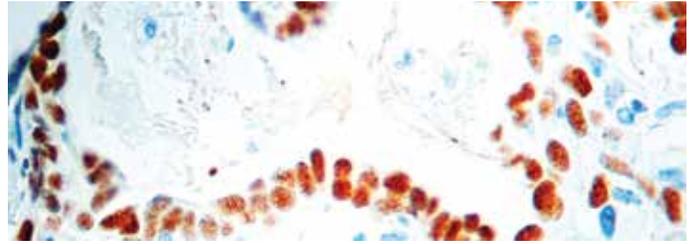
Catalog No.: Mob 437 Concentrated 1ml

Mob 437-05 Concentrated 0.5ml

PDM 177 Prediluted 6ml

F, P/H

Regulatory Status: IVD



Formalin fixed paraffin embedded wilms tumor stained with WT1 antibody (Mob 437).

Immunogen: BALB/C mice were injected with truncated human WT1 protein corresponding to N-terminal amino acids 1-181.

Isotype: IgG1

Positive Control: Wilms tumor

Cellular Localization: Nuclear and/or cytoplasmic

Specificity: Wilms tumor-1 (WT-1), is a gene involved in the induction of Wilms tumor, a pediatric renal malignancy. Wilms tumor is associated with mutations of WT1, a zinc-finger transcription factor that is essential for the development of the metanephric kidney and the urogenital system. The WT1 gene is normally expressed in fetal kidney and mesothelium, and its expression has been suggested as a marker for Wilms tumor and mesothelioma.

Monoclonal Mouse Anti-Human

**XRCC1**

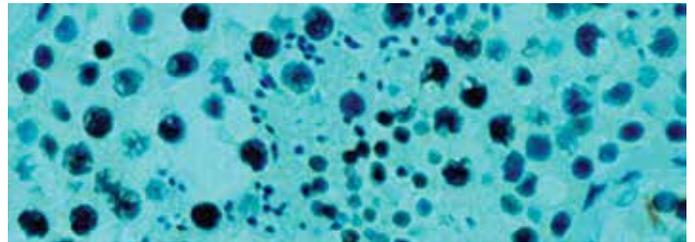
Clone: 33-2-5

Catalog No.: Mob 325 Concentrated 1ml

Mob 325-05 Concentrated 0.5ml

F, P/H

Regulatory Status: RUO



Formalin fixed paraffin embedded human testis stained with XRCC-1 antibody (Mob 325).

Immunogen: BALB/C mice were injected with recombinant human XRCC1 protein.

Isotype: IgG2b

Positive Control: Testis

Cellular Localization: Nuclear

Specificity: This antibody is specific to an 85 kDa protein known as XRCC1. X-ray repair cross complementing 1 (XRCC1) protein plays a role in excision repair of DNA after ionizing irradiation. XRCC1 binds to DNA ligase III through the C-terminal 96 amino acids and to DNA polymerase  $\beta$  through the N-terminal half. In testis XRCC1 is expressed at high levels.

Polyclonal Rabbit Anti-Human

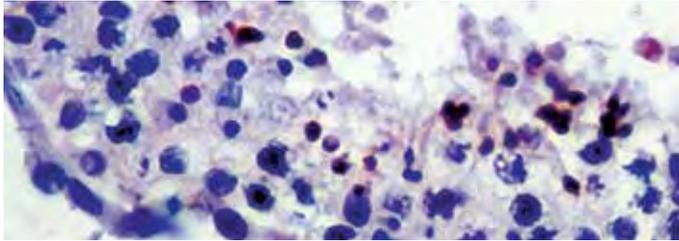
### XRCC2

F, P/H

Catalog No.: RP 082 Concentrated 1ml

RP 082-05 Concentrated 0.5ml

Regulatory Status: RUO



Formalin fixed paraffin embedded human testis stained with XRCC2 antibody (RP 082).

Immunogen: A synthetic peptide derived from the N-terminus of human XRCC2 protein.

Positive Control: Testis

Cellular Localization: Nuclear, cytoplasmic

Specificity: This antibody reacts with a 32 kDa protein, known as XRCC2 (X-ray repair cross complementing 2). XRCC2 is essential for repairing the double strand DNA breaks by homologous recombination between sister chromatids. It is homologous to RAD51. Five human homologues of RAD 51 (XRCC2, XRCC3, RAD51B, RAD51C, RAD51D) interact to form one big complex or several smaller complexes.

Polyclonal Rabbit Anti-Human

### XRCC3

F, P/H

Catalog No.: RP 083 Concentrated 1ml

RP 083-05 Concentrated 0.5ml

Regulatory Status: RUO

Immunogen: A synthetic peptide derived from the N-terminus of human XRCC3 protein.

Positive Control: Testis

Cellular Localization: Nuclear, cytoplasmic

Specificity: This antibody reacts with a 38 kDa protein, known as XRCC3 (X-ray repair cross complementing 3). XRCC3 is essential for repairing the double strand DNA breaks by homologous recombination between sister chromatids. It is homologous to RAD51. Five human homologues of RAD 51 (XRCC2, XRCC3, RAD51B, RAD51C, RAD51D), interact to form one big complex or several smaller complexes.

Monoclonal Mouse Anti-Human

### ZAP-70

F, P/H

Clone: 2F3.2

Catalog No.: Mob 431 Concentrated 1ml

Mob 431-05 Concentrated 0.5ml

PDM 149 Prediluted 6ml

Regulatory Status: IVD

Immunogen: GST-fusion to tandem SH2 domains of human ZAP-70 corresponding to residues 1-254.

Isotype: IgG2a

Positive Control: Tonsil

Cellular Localization: Cytoplasmic

Specificity: Mutations in ZAP-70 gene results in a form of severe combined immunodeficiency syndrome (SCID) in humans. ZAP-70 expression also defines a subset of chronic lymphocytic leukemia (CLL) in patients with unmutated Ig gene and poor clinical course. Recent studies suggest that protein levels of ZAP-70 are elevated in B-cells of CLL patients with non-mutant heavy-chain variable region (IgVH) but not those with the mutant regions. Recent evidence suggests that ZAP-70 could be an excellent prognostic biomarker with high levels of the proteins indicating a poor prognosis.

## FITC Conjugated Antibodies

DBS offers fluorescein isothiocyanate (FITC) conjugated antibodies.

Fluorescent dye-conjugated antibodies can be used in a variety of applications such as immunohistochemistry, fluorescence microscopy and flow cytometry. DBS FITC conjugated antibodies can be used for directly staining on frozen as well as paraffin embedded tissue sections. ■

PRODUCT	CATALOG NO.
Kappa Light Chain-FITC	F 001
Lambda Light Chain-FITC	F 002
C3c Complement-FITC	F 003
C4c Complement-FITC	F 005
Fibrinogen-FITC	F 006
IgA-FITC	F 007
IgG-FITC	F 008
IgM-FITC	F 009
C1q Complement-FITC	F 010



Visit us at [dbiosys.com](http://dbiosys.com) for more about our FITC Conjugated Antibodies.

IMMUNOHISTOCHEMISTRY IS A HIGHLY SENSITIVE METHOD that allows the localization of antigens within a cell or a tissue with high resolution. The method is based on the use of a primary antibody that specifically binds to its complimentary antigen. The bound antigen may be visualized by a variety of methods. ■

DBS offers two types of IHC Detection Systems:

### Polymer Detection System

### Streptavidin Biotin Detection System

#### POLYMER DETECTION SYSTEM

Diagnostic BioSystems offers two types of polymer-based detection systems for biotin-free immunohistochemistry. These detection systems are suitable for demonstrating antigens in formalin-fixed paraffin embedded tissues and cryostat sections.

#### POLYVUE™ PLUS TWO STEP DETECTION SYSTEM

PolyVue™ Plus employs an enhancer reagent with the polymeric enzyme-linked anti-rabbit and anti-mouse immunoglobulins for two-step detection yielding higher sensitivity while maintaining the extremely clean background. The enhanced sensitivity of PolyVue™ Plus enables superior detection of antibodies at lower concentration or weaker signals.

PolyVue™ Plus reagents yield consistent and reproducible antibody detection, regardless of cellular antigen location: nuclear, cytoplasmic or membrane. The broad spectrum mouse/rabbit reagents offer convenience when performing immunohistochemistry with panels of antibodies.

#### FORMAT AND PACK SIZE:

##### READY-TO-USE KITS ARE AVAILABLE IN CONVENIENT SIZES

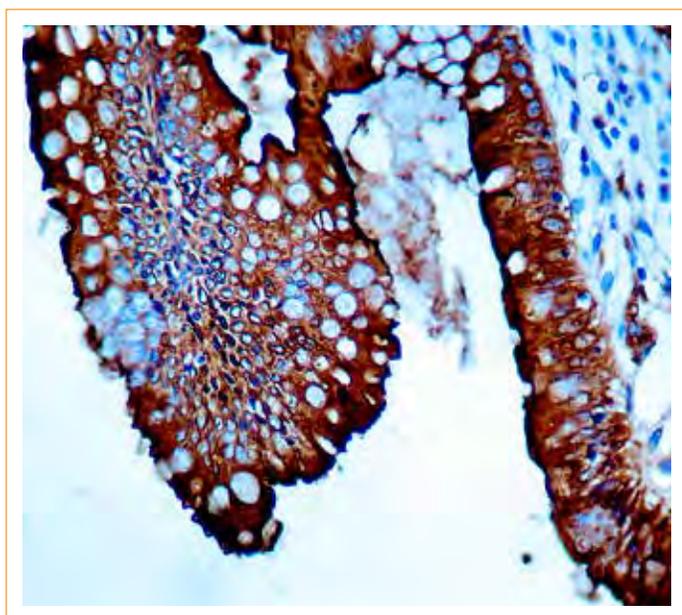
Small Volume Kits	Sufficient reagents for 20–100 tests
Large Volume Kits	Sufficient reagents for 1000 tests
Single components are also available in ready-to-use format	



## PolyVue™ Plus

### HIGHLY SENSITIVE. EXCEPTIONAL DETECTION SYSTEM.

Diagnostic BioSystems' PolyVue™ is a highly sensitive, biotin-free immunostaining detection system formulated to simultaneously detect mouse as well as rabbit antibodies. PolyVue™ employs an enhancer reagent with the polymeric enzyme-linked anti-rabbit and anti-mouse immunoglobulins for two-step detection, yielding higher sensitivity while maintaining the extremely clean background. The enhanced sensitivity of PolyVue™ enables superior detection of antibodies at lower concentration or weaker signals. ■

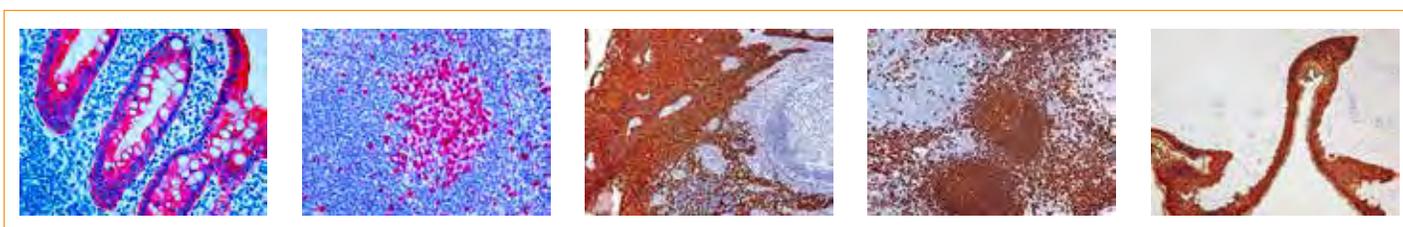


Human colon stained with Carcinoembryonic Antigen (PDR 025) using PolyVue™ HRP polymer system and Stable DAB/Plus™ chromogen.

## PolyVue™ Plus

### ADVANTAGES OVER CONVENTIONAL DETECTION SYSTEMS:

- High sensitivity
- High specificity
- Extremely clean background
- Highly reproducible staining
- Suitable for manual as well as automated stainers
- Shorter incubation times for detection reagents



1

2

3

4

5

1. Human appendix stained with Cytokeratin AE1+AE3 (PDM 072) using PolyVue™ AP polymer system and PermaRed/AP™ chromogen.
2. Human tonsil stained with Ki-67 (PDR 048) using PolyVue™ AP polymer system and PermaRed/AP™ chromogen.
3. Human tonsil stained with Cytokeratin AE1+AE3 (PDM 072) using PolyVue™ HRP polymer system and Stable DAB/Plus™ chromogen.
4. Human tonsil stained with CD 20 (PDM 004) using PolyVue™ HRP polymer system and Stable DAB/Plus™ chromogen.
5. Human skin stained with Cytokeratin H.M.W. (PDM 074) using PolyVue™ HRP polymer system and Stable DAB/Plus™ chromogen.

## PolyVue™ Plus—Two Step Detection System

Clean. Crisp. Clear. Diagnostic BioSystems is committed to improving immunohistochemistry staining one slide at a time. Experience the Diagnostic BioSystems difference. Vibrant, high quality cell staining for sharper IHC results. Our Innovation. Your Solution. ■

### Mouse/Rabbit PolyVue™ AP/PermaRed Detection System

Catalog No.: AV 100R 100 tests  
AV 1000R 1000 tests

Regulatory Status: IVD

The Mouse/Rabbit PolyVue AP/PermaRed Detection System is a high sensitivity, 2-step alkaline phosphatase-labeled detection system for immunohistochemistry. The detection system is polymer-based, yielding significantly lower background than biotin/avidin detection systems. These reagents work equally well with antibodies raised in mouse and rabbit, simultaneously. This kit can detect mouse IgG, IgM and rabbit primary antibodies, both monoclonal and polyclonal. Reagents can be used for manual staining or with automated instruments which can perform PermaRed/AP substrate and chromogen mixing shortly before application to the slide. For use on automated stainers without an onboard mixing station, Mouse/Rabbit PolyVue AP reagents can be used with our stable PermaRed/AP-Auto (refer to catalog number K049-AUTO) for walk-away convenience.

**Kit Contents:** Polymer Penetration Enhancer, Anti-Mouse/Rabbit PolyVue AP label, PermaRed/AP Buffer, PermaRed/AP Chromogen, and an empty mixing bottle for PermaRed/AP.

### Mouse/Rabbit PolyVue™ HRP/DAB Detection System

Catalog No.: PV 100D 100 tests  
PV 1000D 1000 tests

Regulatory Status: IVD

The Mouse/Rabbit PolyVue™ HRP/DAB Detection System is a high sensitivity, 2-step horseradish peroxidase-labeled detection system for immunohistochemistry. The detection system is polymer-based, yielding significantly lower background than biotin/avidin detection systems. These reagents work equally well with antibodies raised in mouse and rabbit, simultaneously. This kit can detect mouse IgG, IgM and rabbit primary antibodies, both monoclonal and polyclonal. Reagents can be used for manual staining or with any automated staining platform. The working solution of Stable DAB/Plus is stable for a week, offering convenience and cost savings due to less hazardous waste generation.

**Kit Contents:** Peroxidase Block, Polymer Penetration Enhancer, Anti-Mouse/Rabbit PolyVue HRP label, Stable DAB/Plus Buffer, Stable DAB/Plus Chromogen, and an empty mixing bottle for Stable DAB/Plus.

NEW

### Mouse/Rabbit PolyVue Plus™ HRP/DAB Detection System

Catalog No.: PVP 1000D 1000 tests  
PVP 100D 100 tests  
PVP 25D 25 tests

Regulatory Status: IVD

The Mouse/Rabbit PolyVue Plus™ HRP/DAB Detection System is a non-biotin, two-step detection system suitable for labeling antigens in formalin-fixed paraffin-embedded tissues and cryostat sections. The PolyVue Plus™ Detection System may also be used with blood smears, cytosmears, and cell preparations. This system has been developed by directly labeling immunoglobulins with enzymes using a proprietary tandem hyperlabelling technology. This ensures consistent and reproducible immunostaining for all types of nuclear, cytoplasmic and membrane antigens in different types of tissues with significantly lower background than detection systems using biotin and avidin conjugates.

**Kit Contents:** Tissue Primer, Background Blocker, PolyVue Plus Mouse/Rabbit HRP Enhancer, PolyVue Plus Mouse/Rabbit HRP Label, Stable DAB Plus Buffer, Stable DAB Plus Chromogen, and an empty mixing bottle.

### Montage PolyVue Plus™ Auto Detection System

Catalog No.: PVP 100-AUTO 100 tests

Regulatory Status: IVD

The Montage™ PolyVue Plus Auto Detection System is a non-biotin, two-step detection system suitable for labeling antigens in formalin-fixed paraffin-embedded tissues and cryostat sections.

Montage™ PolyVue Plus Auto Detection System can simultaneously detect both mouse and rabbit antibodies. This system is suitable for use with mouse IgG, IgM and rabbit primary antibodies, both monoclonal and polyclonal. This Detection System has been designed for automated staining using the DBS Montage 360™. The increased sensitivity of the Montage™ PolyVue Plus Auto Detection System enables faster staining procedures without compromising results.

**Kit Contents:** Montage™ Tissue Primer, Montage™ PolyVue Enhancer, Montage™ Background Blocker, Montage™ PolyVue HRP, Montage™ DAB Buffer, Montage™ DAB Substrate Chromogen, Montage™ Hematoxylin.

NEW  
Montage 360™



All of our detection systems are suitable for manual staining or use on automated staining instruments and are available in ready to use formats.

Visit us at [dbiosys.com](http://dbiosys.com) for more about our Detection Systems.

# UnoVue™ Plus—One Step Detection System

The UnoVue™ detection systems use anti-rabbit and anti-mouse immunoglobulins, directly labeled with enzymes using a proprietary hyperlabelling technology. UnoVue™ is a one-step detection system, enabling faster staining procedures than traditional two-step methods using biotin and avidin/streptavidin conjugates with significantly lower background. Species-specific UnoVue™ detection kits are well suited for multiplex multicolor immunohistochemical staining assays.

UnoVue™ reagents yield consistent and reproducible antibody detection, regardless of cellular antigen location: nuclear, cytoplasmic or membrane. The broad spectrum mouse/rabbit reagents offer convenience when performing immunohistochemistry with panels of antibodies. ■

## Mouse/Rabbit UnoVue Plus™ PermaRed Detection System

Catalog No.: UVP 1000AR 1000 tests  
UVP 100AR 100 tests  
UVP 25AR 25 tests

NEW

Regulatory Status: IVD

The Mouse/Rabbit UnoVue Plus™ AP PermaRed Detection System is a non-biotin, one-step Mouse/Rabbit polymer detection system suitable for demonstrating antigens in formalin-fixed paraffin-embedded tissues and cryostat sections. The UnoVue Plus™ Detection System may also be used with blood smears, cytosmears, and cell preparations.

**Kit Contents:** Anti-Mouse/Rabbit AP Polymer, PermaRed AutoPlus Buffer, and PermaRed AutoPlus Chromogen.

## Montage UnoVue Plus™ Auto Detection System

Catalog No.: UVP100-AUTO 100 tests

NEW  
Montage 360™

Regulatory Status: IVD

The Montage UnoVue Plus™ Auto Detection System is a non-biotin, one-step Mouse/Rabbit polymer detection system suitable for demonstrating antigens in formalin-fixed paraffin-embedded tissues and cryostat sections. The Montage UnoVue Plus™ detection kits have been developed by directly labeling anti-mouse and anti-rabbit immunoglobulins with enzymes using a proprietary tandem hyperlabelling technology. This ensures consistent and reproducible immunodetection of mouse and rabbit antibodies with a single reagent. Nuclear, cytoplasmic and membrane antigens in different types of tissues can be detected readily.

The single step Montage UnoVue Plus™ Detection System enables faster staining procedures than traditional two-step methods using biotin and avidin/streptavidin conjugates, with significantly lower background.

The Montage UnoVue Plus™ Auto Detection System is suitable for use with mouse rabbit IgG and IgM antibodies, both monoclonal and polyclonal. The reagents have been optimized to be used with the Montage 360™ automated staining platform.

**Kit Contents:** Montage™ Tissue Primer, Montage™ Background Blocker, Montage™ Mouse/Rabbit AP, Montage™ PermaRed Auto Plus Buffer, Montage™ PermaRed Auto Plus Chromogen, and Montage™ Hematoxylin.

## Mouse UnoVue™ HRP/DAB Detection System

Catalog No.: UM 100PD 100 tests

Regulatory Status: IVD

The Mouse UnoVue HRP/DAB Detection System is a polymer-based 1-step horseradish peroxidase-labeled detection system for immunohistochemistry. This kit can detect mouse IgG and IgM antibodies, with significantly lower background than biotin/avidin detection systems. The Mouse UnoVue™ HRP/DAB Detection System can be used for manual staining or with any automated staining instrument. The working solution of Stable DAB/Plus is stable for a week, offering convenience and cost savings due to less hazardous waste generation. This species-specific detection system is particularly useful for multiplex immunohistochemical staining assays.

**Kit Contents:** Peroxidase Block, Anti-Mouse HRP Polymer, Stable DAB/Plus Buffer, Stable DAB/Plus Chromogen, and an empty mixing bottle for Stable DAB/Plus.

## Mouse/Rabbit UnoVue™ HRP/DAB Detection System

Catalog No.: UMR 100PD 100 tests  
UMR 1000PD 1000 tests

Regulatory Status: IVD

The Mouse/Rabbit PolyVue HRP/DAB Detection System is a polymer-based 1-step horseradish peroxidase-labeled detection system for immunohistochemistry. These reagents detect antibodies raised in mouse and rabbit, simultaneously, with significantly lower background than biotin/avidin detection systems. This kit can detect mouse IgG, IgM and rabbit primary antibodies, both monoclonal and polyclonal. Reagents can be used for manual staining or with any automated staining platform. The working solution of Stable DAB/Plus is stable for a week, offering convenience and cost savings due to less hazardous waste generation.

**Kit Contents:** Peroxidase Block, Anti-Mouse/Rabbit HRP Polymer, Stable DAB/Plus Buffer, Stable DAB/Plus Chromogen, and an empty mixing bottle for Stable DAB/Plus.

## Rabbit UnoVue™ AP/PermaRed Detection System

Catalog No.: UR 100AR 100 tests

Regulatory Status: IVD

The Rabbit UnoVue™ AP/PermaRed Detection System is a polymer-based 1-step alkaline phosphatase-labeled detection system for immunohistochemistry. This kit can detect rabbit antibodies, both monoclonal and polyclonal, with significantly lower background than biotin/avidin detection systems. The Rabbit UnoVue™ AP/PermaRed Detection System can be used for manual staining or with automated instruments which can perform PermaRed substrate and chromogen mixing shortly before application to the slide. For use on automated stainers without an onboard mixing station, the anti-rabbit UnoVue™ AP polymer reagent can be used with our stable PermaRed/AP-Auto (refer to catalog number K049-AUTO) for walk-away convenience. This species-specific detection system is particularly useful for multiplex immunohistochemical staining assays.

**Kit Contents:** Anti-Rabbit-AP Polymer, PermaRed/AP Buffer, PermaRed/AP Chromogen, and an empty mixing bottle for PermaRed/AP.

## Streptavidin Biotin Based Detection System

Diagnostic BioSystems offers immunostaining detection systems based on streptavidin/biotin technology. We offer species-specific kits to detect antibodies raised in rabbits or mice and convenient broad spectrum kits to detect both. DBS detection systems are available in concentrated and ready-to-use formats, with the secondary antibody containing either goat anti-mouse and anti-rabbit IgG, goat anti-mouse IgG, or goat anti-rabbit IgG. ■

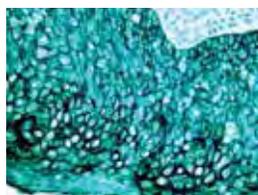
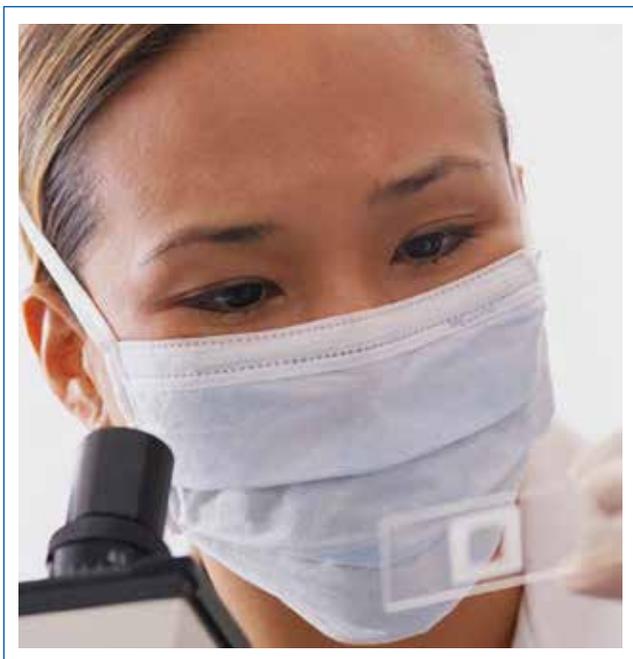
KIT	TEST SIZE	CATALOG NO.
Peroxidase Mouse & Rabbit Kit (AEC)	100 tests	KP 50A
Peroxidase Mouse Kit (AEC)	100 tests	KP 50AM
Peroxidase Rabbit Kit (AEC)	100 tests	KP 50AR
Peroxidase Mouse & Rabbit Kit (DAB Tablets)	100 tests	KP 50D
Peroxidase Mouse Kit (DAB Tablets)	100 tests	KP 50DM
Peroxidase Rabbit Kit (DAB Tablets)	100 tests	KP 50DR
Peroxidase Mouse & Rabbit Kit (DAB Liquid)	100 tests	KP 50L
Peroxidase Mouse Kit (DAB Liquid)	100 tests	KP 50LM
Peroxidase Rabbit Kit (DAB Liquid)	100 tests	KP 50LR
Peroxidase Mouse & Rabbit Kit*	1000 tests	KP 500
Peroxidase Mouse Kit*	1000 tests	KP 500M
Peroxidase Rabbit Kit*	1000 tests	KP 500R
Alk. Phos. Mouse & Rabbit Kit (Fast Red)	100 tests	KA 50F
Alk. Phos. Mouse Kit (Fast Red)	100 tests	KA 50FM
Alk. Phos. Rabbit Kit (Fast Red)	100 tests	KA 50FR
Alk. Phos. Mouse & Rabbit Staining Kit*	1000 tests	KA 500
Alk. Phos. Mouse Staining Kit*	1000 tests	KA 500M
Alk. Phos. Rabbit Staining Kit*	1000 tests	KA 500R

\*These kits do not contain any substrate/chromogen

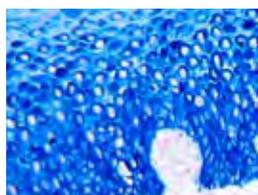
### Ready-to-Use Kits Components

KIT COMPONENT	VOLUME	CATALOG NO.
Mouse Link	10ml	M 001
Mouse Link	100ml	M 002
Rabbit Link	10ml	M 003
Rabbit Link	100ml	M 004
Mouse & Rabbit Link	10ml	M 005
Mouse & Rabbit Link	100ml	M 006
HRP Label	10ml	M 007
HRP Label	100ml	M 008
ALP Label	10ml	M 009
ALP Label	100ml	M 010

DIAGNOSTIC BIOSYSTEMS OFFERS ANCILLARY REAGENTS, useful when flexibility is of utmost importance. Our products provide solutions for your IHC staining challenges. We focus on improving reagents for IHC staining. Twenty years expertise in IHC assay development means we understand how to optimize reagents for existing staining platforms. Vibrant, high quality cell staining for sharper IHC results. Our ancillary reagents include: Chromogens, Antigen Retrieval Solutions, Buffers and Accessory Reagents. ■



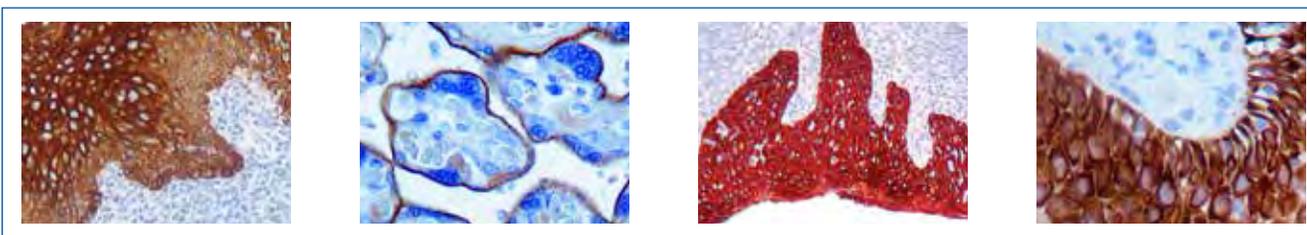
**PermaGreen/AP** is a beautiful aqua green substrate-chromogen system achieving results within 5-30 minutes. Designed for either IHC or ISH when using alkaline phosphatase, it is insoluble in alcohol and xylene-substitutes, allowing sections to be dehydrated in alcohol and permanently mounted.



**PermaBlue/AP** is a substrate-chromogen system producing a vibrant blue color like no other in 5-20 minutes at room temperature. Designed for either IHC or ISH when using alkaline phosphatase, it is insoluble in alcohol and xylene-substitutes, allowing sections to be dehydrated in alcohol and permanently mounted.



**PermaRed/AP** produces a brilliant dark red color within 5-15 minutes at room temperature and is a substrate-chromogen system designed to be used for either IHC or ISH with alkaline phosphatase. PermaRed/AP is insoluble in organic solvents allowing it to be dehydrated in alcohol and permanently mounted.



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- Intensi/Fire** is a DAB enhancing solution, which darkens the staining intensity of DAB without creating background. Increasing the sensitivity of the detection system allows the user the cost-effective option of diluting the primary antibody.
- HistoZyme** is a proteolytic enzyme solution which unmask immunoreactive sites altered by fixation and/or embedding. Common aldehyde fixatives, such as formalin, work by protein cross-linking. Cross-linking can mask antigens preventing primary antibody binding, yielding weak staining or false negative results. Treatment with proteolytic enzymes is required to expose the antigen. High quality results can be achieved using HistoZyme with only a 5 minute room temperature incubation.
- Mono AEC/Plus** is a stable ready-to-use AEC chromogen substrate solution for use in immunoperoxidase staining. Mono AEC/Plus produces a vibrant red color that contrasts well with a blue hematoxylin counter stain. Staining can be achieved rapidly in 5-15 minutes. The ready-to-use solution saves setup time. Unused solution is stable and can be saved for later use.
- Stable DAB/Plus** DAB is the most widely used chromogen for immunoperoxidase staining and is valued for its high sensitivity and clean background. Stable DAB/Plus is more sensitive than traditional DAB solutions, enabling the user to reduce incubation times or primary antibody dilutions, saving time and money. Stable DAB/Plus working solution has a 1-week stability. This saves preparation time and yields less hazardous waste than traditional DAB solutions.

## Chromogens

New discoveries in the clinic are demanding more functionality from IHC. DBS offers novel proprietary chromogens in Brown, Red, Green and Blue for easy to develop multistains in your own lab. ■

- Novel chromogens for use in MultiPlex IHC
- Optimized for automated protocols
- Optimized with UnoVue™ one-step detection for easy setup and standardized performance

DBS provides chromogens used with two commonly used enzyme labels: Horse Radish Peroxidase (HRP) and Alkaline Phosphatase (AP).

### AEC Chromogen/Substrate Kit

Catalog No.: [K 003 Concentrated 3ml](#)

Regulatory Status: IVD

Even though DAB is a much more sensitive chromogen compared to 3-amino-9-ethylcarbazol (AEC), because of its carcinogenic nature, some labs avoid using DAB. To resolve this problem, we have designed AEC chromogen in liquid format. AEC is a chromogen of choice when performing immunoperoxidase staining. It has been well accepted among pathologists because of its relatively less toxic nature compared to DAB. It produces a red colored end product which gives a good contrast with blue hematoxylin counter stain. Specimens stained with AEC cannot be dehydrated in ethanol and should be mounted in aqueous based mounting medium such as C/C Mount (cat. K 002).

### BCIP/NBT Chromogen/Substrate Kit

Catalog No.: [K 006 Ready-to-Use 15ml](#)

Regulatory Status: IVD

Alkaline phosphatase, an enzyme derived from bovine intestinal mucosa, is often used as a label for in situ hybridization and immunohistochemistry. Detection of this enzyme requires the use of an insoluble colored substrate. DBS offers a stable, BCIP/NBT solution in ready-to-use form. It produces a blue colored end product which gives a good contrast with nuclear fast red counterstain. Specimens stained in BCIP/NBT cannot be dehydrated in ethanol and hence should be mounted in aqueous based mounting medium such as C/C Mount (cat. K 002).

### BCIP/INT Chromogen/Substrate Kit

Catalog No.: [K 008 Ready-to-Use 15ml](#)

Regulatory Status: IVD

Alkaline phosphatase, an enzyme derived from bovine intestinal mucosa, is often used as a label for in situ hybridization and immunohistochemistry. Detection of this enzyme requires the use of an insoluble colored substrate. DBS offers a stable, BCIP/INT solution in ready-to-use form. It produces a brown colored end product which gives a good contrast with blue hematoxylin counterstain. Specimens stained in BCIP/INT cannot be dehydrated in ethanol and should be mounted in aqueous based mounting medium such as C/C Mount (cat. K 002).

### DAB Chromogen/Substrate Kit

Catalog No.: [K 001 Tablets 20 each](#)

Regulatory Status: IVD

DAB is a chromogen of choice when performing immunoperoxidase staining. It is well accepted among pathologists because DAB is much more sensitive and gives cleaner background than aminoethylcarbazole (AEC). Specimens stained with DAB can be dehydrated in ethanol, cleared in xylene and mounted for permanent record keeping. However, because of its carcinogenic nature, some labs would like to avoid the handling of DAB powder. To resolve this problem, we offer DAB in tablet format to minimize the exposure of lab personnel to DAB powder.

### DAB Chromogen/Substrate Kit

Catalog No.: [K 007 Concentrated Chromogen 10ml, Substrate Buffer 200ml](#)

Regulatory Status: IVD

DAB is a widely used chromogen for immunoperoxidase staining and immunoblotting. It has been well accepted among pathologists because DAB is more sensitive and gives cleaner background than aminoethylcarbazole (AEC). Specimens stained with DAB can be dehydrated in ethanol and cleared in xylene and can be mounted for permanent record keeping. However, because of its carcinogenic nature, some labs would like to avoid handling DAB powder. To resolve this problem, we offer DAB in liquid format to minimize the exposure of lab personnel to DAB powder.

### 20X DAB Enhancer

Catalog No.: [K 012 Concentrated 10ml](#)

Regulatory Status: IVD

DAB is a widely used chromogen for immunoperoxidase staining and immunoblotting. DAB gives cleaner background than aminoethylcarbazole (AEC). Specimens stained in DAB can be dehydrated in ethanol and cleared in xylene and can be mounted for permanent record keeping. Strength of signal generated during the immunostaining is the key to a good staining. The reagent is a stable liquid solution which increases the staining intensity of specimens stained with DAB several-fold, thereby increasing the efficiency of detection.

### Fast Red TR Salt Tablets

Catalog No.: [DMR 0440T Tablets 20 each](#)

Regulatory Status: IVD

Fast Red tablets are used as a chromogen for alkaline phosphatase AP-based immunostaining systems. AP hydrolyses naphthol phosphate esters to phenolic compounds and phosphates. The phenol couples to colorless diazonium salts to produce insoluble, colored azo dye. Fast Red produces a red colored end product.

### Fast Red TR Salt Tablets Kit

Catalog No.: [K 031 Chromogen Tablets 10 each, Buffer 2.5ml, Substrate 0.5ml](#)

Regulatory Status: IVD

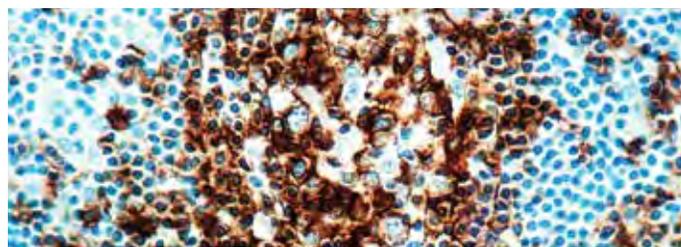
This alkaline phosphatase chromogen is designed to be used when tissue specimens do not require dehydration. Fast Red is not stable during the dehydration process and is not compatible with alcohol and xylene. Fast Red produces a brilliant red-colored end product. Tissues stained with Fast Red should be mounted with aqueous mounting media such as CC/Mount (cat. K 002).

**NEW**

### High Contrast DAB

Catalog No.: [K 055 Concentrated Chromogen 5ml, Ready-to-Use Substrate 200ml](#)

Regulatory Status: IVD



Formalin fixed paraffin embedded lung adenocarcinoma human tissue stained with CD20 antibody (PDM 004) labeled with High Contrast DAB (K 055) produces a dark chocolate brown color.

DAB, is a widely used chromogen for immunoperoxidase staining, and is well accepted among pathologists because of its increased sensitivity and decreased background when compared to amino ethylcarbazole (AEC). Specimens stained with DAB can be dehydrated, cleared, and permanently mounted. High Contrast DAB is more sensitive and stable than traditional working DAB solutions.

## Intensi/Fire

Catalog No.: K 045 Ready-to-Use 15ml

Regulatory Status: IVD

One of the hallmarks of successful IHC is the strength of the signal generated during immunostaining. DAB, widely used as a chromogen for immunoperoxidase staining, has been well accepted by pathologists due to its superior performance compared to amino ethylcarbazole (AEC). Tissue specimens stained with DAB show increased staining intensity when Intensi/Fire is applied. Only a brief incubation is required. Increased sensitivity of the detection system allows the cost-effective option of diluting the primary antibody 5 to 10 fold. Intensi/Fire increases the signal intensity without creating background staining.

## Mono AEC/Plus

Liquid Format

Catalog No.: K 050 Ready-to-Use 30ml

K 050-110 Ready-to-Use 110ml

Regulatory Status: IVD

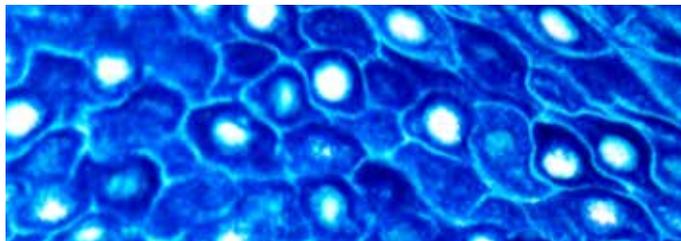
Mono AEC/Plus is a single, highly stable, AEC chromogen/substrate liquid solution. When used in conjunction with immunoperoxidase detection systems, AEC produces a red colored end product, yielding strong contrast when combined with a blue hematoxylin counterstain. AEC has been well accepted among histotechnologists because it is less chemically hazardous than DAB. Specimens stained using Mono AEC/Plus cannot be dehydrated in ethanol and must be mounted in an aqueous-based mounting medium such as CC Mount (cat. K 002).

## PermaBlue Plus/AP

Catalog No.: K 058 Ready-to-Use 30ml

K 058-110 Ready-to-Use 110ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with HMW CK antibody (PDM 074) labeled with PermaBlue Plus/AP Chromogen (K 058) produces a distinct bright blue color.

PermaBlue Plus/AP is a substrate-chromogen system designed to be used for either IHC or ISH when utilizing alkaline phosphatase. PermaBlue Plus/AP has been reformulated to increase stability of the working solution while producing a distinct bright blue color. PermaBlue Plus/AP is insoluble in alcohol and xylene substitutes; therefore sections can be dehydrated in alcohol, cleared in xylene substitute, and permanently mounted.

## PermaBlue/AP

Catalog No.: K 051 Ready-to-Use 30ml

K 051-110 Ready-to-Use 110ml

Regulatory Status: IVD

PermaBlue/AP is a substrate-chromogen system designed to be used for either IHC or ISH when utilizing alkaline phosphatase. PermaBlue/AP produces a vibrant blue color. PermaBlue/AP is insoluble in alcohol and xylene substitutes (both aliphatic hydrocarbon and citrus based); therefore sections can be dehydrated in alcohol, cleared in xylene substitute, and permanently mounted.

## PermaBlue/AP-Auto

Catalog No.: K 051-AUTO 30ml

K 051-AUTO-110 110ml

Regulatory Status: IVD

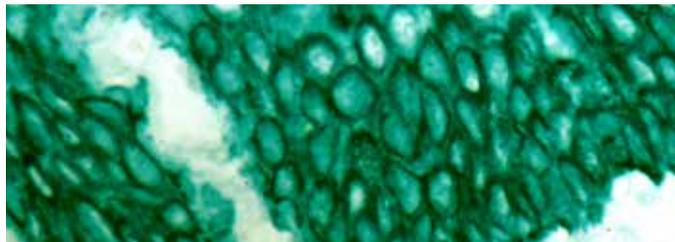
PermaBlue/AP-Auto is a substrate/chromogen system for use with alkaline phosphatase (AP) detection in immunohistochemistry (IHC) or in situ hybridizations (ISH) run on automated staining instruments.

## PermaGreen Plus/AP

Catalog No.: K 059 Ready-to-Use 30ml

K 059-110 Ready-to-Use 110ml

Regulatory Status: IVD



Formalin fixed paraffin embedded human tonsil stained with HMW CK antibody (PDM 074) labeled with PermaGreen Plus/AP Chromogen (K 059) produces a strong green color.

PermaGreen Plus/AP is a substrate-chromogen system designed for either IHC or ISH when utilizing alkaline phosphatase. PermaGreen Plus/AP has been modified to increase staining intensity, producing a strong green color that is insoluble in alcohol and xylene substitutes; therefore sections can be dehydrated in alcohol, cleared in a xylene substitute, and permanently mounted.

## PermaGreen/AP

Catalog No.: K 052 Ready-to-Use 30ml

K 052-110 Ready-to-Use 110ml

Regulatory Status: IVD

PermaGreen/AP is a substrate-chromogen system designed for either IHC or ISH when utilizing alkaline phosphatase. PermaGreen/AP produces a green color that is insoluble in alcohol and xylene substitutes (both aliphatic hydrocarbon and citrus based); therefore sections can be dehydrated in alcohol, cleared in a xylene substitute, and permanently mounted.

## PermaRed/AP

(Alcohol & Xylene Compatible)

Catalog No.: K 049 Ready-to-Use 30ml

K 049-110 Ready-to-Use 110ml

Regulatory Status: IVD

PermaRed/AP is a substrate-chromogen system designed to be used for either IHC or ISH when utilizing alkaline phosphatase. PermaRed/AP produces a brilliant dark red color. PermaRed/AP is insoluble in organic solvents; therefore sections can be dehydrated in alcohol, cleared in xylene (or a xylene-substitute), and permanently mounted.

Experience the DBS difference.  
Vibrant, high quality cell staining  
for sharper IHC results.

Visit us at: [dbiosys.com](http://dbiosys.com)



### PermaRed/AP-Auto

For Use on Automated Staining Platforms

Catalog No.: K 049-AUTO Ready-to-Use 30ml

K 049-AUTO-110 Ready-to-Use 110ml

Regulatory Status: IVD

PermaRed/AP-Auto produces a red color, ranging from pink to brilliant dark red, depending on the signal intensity. It is insoluble in organic solvents; therefore sections can be dehydrated in alcohol, cleared in xylene (or a xylene-substitute), and permanently mounted.

PermaRed/AP-Auto has been formulated for on-slide mixing. The instrument should be programmed to apply the substrate-buffer to the slide followed by application of the chromogen reagent. The substrate-buffer and chromogen components are stable in their separate formats. They can be loaded into the reagent rack at the beginning of the staining run with the other reagents, for walk away convenience.

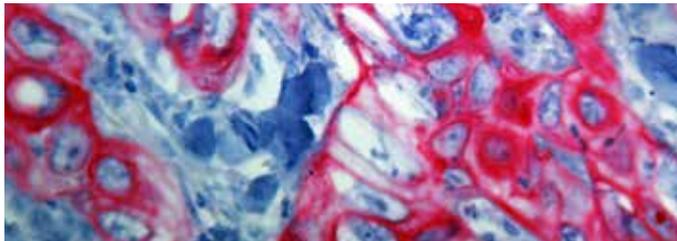
### PermaRed/AP-AutoPlus

Catalog No.: K 057-AUTOPLUS 30ml

K 057-AUTOPLUS 110 110ml



Regulatory Status: IVD



Formalin fixed paraffin embedded squamous cell carcinoma human tissue stained with CK 5/6 antibody (MOB 362) labeled with PermaRed AutoPlus (K 057) produces a brilliant red color.

PermaRed/AP-Auto/Plus produces a red color, ranging from pink to brilliant dark red, depending on the signal intensity. It is insoluble in organic solvents; therefore sections can be dehydrated in alcohol, cleared in xylene (or a xylene-substitute), and permanently mounted.

### Stable DAB/Plus

Catalog No.: K 047 Concentrated Chromogen 5ml

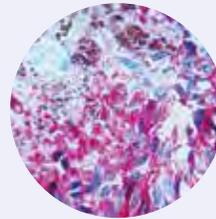
Ready-to-Use Substrate 200ml

Regulatory Status: IVD

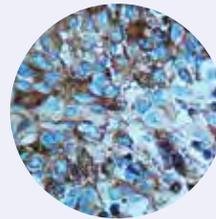
DAB, a widely used chromogen for immunoperoxidase staining, is well accepted among pathologists because of its high sensitivity and cleaner background than aminoethylcarbazole (AEC). Specimens stained in DAB can be dehydrated, cleared, and mounted for permanent record keeping. Stable DAB/Plus is more sensitive and stable than traditional working DAB solutions, which reduces hazardous waste generation.

DBS ANTIBODIES FOR DERMAPATH	CODE
HMB45	PDM 011
MART-1/Melan-A	PDM 153
Melanoma Cocktail	PDM 146
S100	PDM 088
MiTF	PDM 168

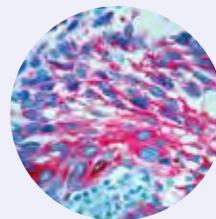
## Improving Dermatologic Diagnosis with PermaRed / AP AutoPlus



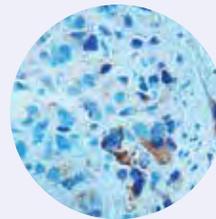
HMB45 melanoma utilizing PermaRed/AP AutoPlus



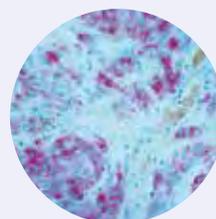
HMB45 melanoma utilizing Stable DAB Plus



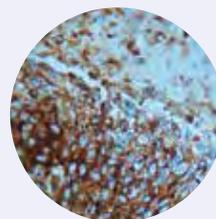
MART1 melanoma utilizing PermaRed/AP AutoPlus



MART1 melanoma utilizing Stable DAB Plus



Pan Melanoma Cocktail on melanoma utilizing PermaRed/AP AutoPlus



Pan Melanoma Cocktail on melanoma utilizing Stable DAB Plus

# Antigen Retrieval Solutions

Epitope retrieval is an essential pretreatment procedure that facilitates increased reactivity between antibody and antigen by unmasking antigen sites thus making them available for binding with the antibody of interest. Epitope retrieval techniques fall into two main categories, enzyme induced epitope recovery and heat induced epitope recovery. ■

Diagnostic BioSystems offers products for both enzyme based and heat induced epitope retrieval.

## 10X Antigen Retrieval Buffer High, pH 10.0

Catalog No.: [K 044 Concentrated 500ml](#)

Regulatory Status: IVD

Antigen Retrieval Buffer High, pH 10, is intended for heat-induced target retrieval prior to immunohistochemical staining procedures. It is well-suited for use on formalin-fixed, paraffin-embedded tissue sections mounted on glass slides.

## Antigen Unmasker System

Catalog No.: [DSI 5030 Tablets 20 each](#)

Regulatory Status: IVD

Antigen Unmasker System is intended for heat-induced target retrieval prior to immunohistochemical staining procedures. It is free from heavy metals eliminating the risk of exposure to lab personnel, resolving handling and disposal problems.

## 10X Citrate Buffer For Heat Induced Epitope Recovery, pH 6.0

Catalog No.: [K 035 Concentrated 500ml](#)

Regulatory Status: IVD

Citrate buffer, pH 6, is intended for heat-induced target retrieval prior to immunohistochemical staining procedures. It is well-suited for use on formalin-fixed, paraffin-embedded tissue sections and on cytological specimens.

## 10X Citrate Buffer For Heat Induced Epitope Recovery, pH 7.0

Catalog No.: [K 036 Concentrated 500ml](#)

Regulatory Status: IVD

Citrate buffer, pH 7, is intended for heat-induced target retrieval prior to immunohistochemical staining procedures. It is well-suited for use on formalin-fixed, paraffin-embedded tissue sections and on cytological specimens.

## 10X Citrate Buffer For Heat Induced Epitope Recovery, pH 8.0

Catalog No.: [K 037 Concentrated 500ml](#)

Regulatory Status: IVD

Citrate buffer, pH 8, is intended for heat-induced target retrieval prior to immunohistochemical staining procedures. It is well-suited for use on formalin-fixed, paraffin-embedded tissue sections and on cytological specimens.

## 10X EDTA Buffer For Heat Induced Epitope Recovery, pH 8.0

Catalog No.: [K 038 Concentrated 500ml](#)

Regulatory Status: IVD

EDTA buffer, pH 8, is intended for heat-induced target retrieval prior to immunohistochemical staining procedures. It is well-suited for use on formalin-fixed, paraffin-embedded tissue sections mounted on glass slides.

## HistoZyme

Catalog No.: [K 046 Ready-to-Use 15ml](#)

[K 046-50 Ready-to-Use 50ml](#)

Regulatory Status: IVD

HistoZyme is a proteolytic enzyme solution that results in superior staining over traditionally used enzyme pretreatments, such as pepsin and trypsin. Moreover, HistoZyme requires only a brief incubation at room temperature. Performing antigen recovery with HistoZyme, will allow you to dilute the primary antibody 5 to 10 fold further and achieve optimal staining.

## Montage™ Citrate Antigen Retrieval Solution

Catalog No.: [K 035-500AN 500ml](#)

Regulatory Status: IVD

Montage™ Citrate Antigen Retrieval Solution, pH 6, is designed for optimal performance when used together with the Montage 360™ System. This reagent can also be used as a target retrieval solution (HIER) after conventional deparaffinization of the tissue sections.

NEW  
Montage 360™

## Montage™ EDTA Antigen Retrieval Solution

Catalog No.: [K 038-500AN 500ml](#)

Regulatory Status: IVD

Montage™ EDTA Antigen Retrieval Solution, pH 8, is designed for optimal performance when used together with the Montage 360™ System. This reagent can also be used as a target retrieval solution (HIER) after conventional deparaffinization of the tissue sections.

NEW  
Montage 360™

## Montage™ HistoZyme

Catalog No.: [K 046-10 AN 10ml](#)

Regulatory Status: IVD

HistoZyme is a proteolytic enzyme solution that results in superior staining over traditionally used enzyme pretreatments, such as pepsin and trypsin. Montage™ HistoZyme, is designed for optimal performance when used together with the Montage 360™ System.

NEW  
Montage 360™

## 25X Proteinase K

Catalog No.: [K 030 Concentrated 2ml](#)

Regulatory Status: IVD

Proteinase K is specifically formulated to achieve proteolytic digestion of formalin fixed, paraffin embedded tissue sections prior to performing in situ hybridization procedures.

## Solution Pepsin™

Catalog No.: [K 009 Ready-to-Use 50ml](#)

Regulatory Status: IVD

Fixation is one of the most critical aspects of immunostaining. If the antigen is not properly fixed it can be washed out of the specimen. However, overfixation can cause problems such as masking or denaturation of the antigen. Formaldehyde is probably the best all-around fixative, due to its cross-linking characteristics. Length of fixation is important for preventing antigen masking. Immunoglobulins are especially susceptible to overfixation with formalin. In such cases, treatment with proteolytic enzyme can digest excess aldehyde linkages and expose the antigen.

## 10X Tris-EDTA Buffer For Heat Induced Epitope Recovery, pH 9.0

Catalog No.: [K 043 Concentrated 500ml](#)

Regulatory Status: IVD

Tris-EDTA buffer, pH 9, is intended for heat-induced target retrieval prior to immunohistochemical staining procedures. It is well-suited for use on formalin-fixed, paraffin-embedded tissue sections mounted on glass slides.

## Buffers

### 10X Immuno Wash Buffer

Catalog No.: K 005 Concentrated 1 Liter

Regulatory Status: IVD

Immuno Wash Buffer is specifically designed to remove loosely bound antibodies effectively and efficiently, yielding a cleaner background.

### 10X Montage™ IHC Wash Buffer

Catalog No.: K 005-500AN 500ml

Regulatory Status: IVD

Montage™ IHC Wash Buffer, is designed for optimal performance when used together with the Montage 360™ System. Immuno Wash Buffer is specifically designed to remove loosely bound antibodies effectively and efficiently, yielding a cleaner background.

### Phosphate Buffered Saline Tablets

Catalog No.: DMR E404-01 Tablets 100 each

Regulatory Status: IVD

One tablet dissolved in 100ml of de-ionized water, yields 1X PBS with a pH of 7.4.

## Accessory Reagents

### Alkaline Phosphatase Diluent

(With Background Reducing Component)

Catalog No.: K 028 Concentrated 1000ml

Regulatory Status: IVD

Alkaline Phosphatase Diluent is specifically designed to dilute alkaline phosphatase conjugated antibodies for immunohistochemistry. In order to obtain an optimal staining, correct antibody dilution as well as selection of appropriate diluent is critical. Ionic strength, pH of the environment and the presence or absence of detergents can affect the binding as well as the stability of the tertiary antibody. The optimal pH together with stabilizing proteins in Alkaline Phosphatase Diluent ensures the maximum stability of the tertiary antibodies. Our Alkaline Phosphatase Diluent contains optimal concentrations of sodium chloride and detergents to prevent nonspecific binding and enable better penetration of tertiary antibodies.

### Alkaline Phosphatase Enhancer

Catalog No.: K 011 Ready-to-Use 250ml

Regulatory Status: IVD

Alkaline phosphatase, an enzyme derived from bovine intestinal mucosa, is often used as a label for in situ hybridization and immunohistochemistry. Detection of this enzyme requires the generation of an insoluble colored reaction end product. DBS has introduced a new stable solution to increase the signal generated by alkaline phosphatase several fold. A single treatment of tissue sections with enhancer before the treatment with substrate/chromogen enables the visualization of difficult to localize antigens. This enhancer works well with Fast Red but can be used with BCIP/NBT and BCIP/INT also. Specimens stained with the above substrates/chromogens cannot be dehydrated in ethanol and should be mounted in aqueous based mounting medium such as C/C Mount (cat. K 002).

### Background Blocker™

Catalog No.: K 023 Ready-to-Use 100ml

Regulatory Status: IVD

Background Blocker is a unique serum-free blocking solution used to reduce nonspecific background during immunostaining techniques. Background Blocker is a universal blocking agent, eliminating the need for matching species with the link antibody. This blocking reagent has been shown to be superior to serum-based blocking solutions. Background Blocker can be used for ELISA and Western blotting techniques as well as immunohistochemistry.

### Broad Spectrum Negative Control

Catalog No.: K053-06 6ml

K053-100 100ml

K053-25 25ml

NEW

Regulatory Status: IVD

Negative controls are used to determine the specificity of an antibody. No staining should be observed when the primary antibody is omitted.

This product is specifically designed to work with rabbit, mouse and goat antibodies. The Broad Spectrum Negative Control has been titrated to work with Polymer-based Secondary Systems in manual and automated IHC platforms.

### CC/Mount™

#### Aqueous Permanent Mounting Medium

Catalog No.: K 002 Ready-to-Use 30 ml

K 002-200 Ready-to-Use 200ml

Regulatory Status: IVD

AEC and Fast Red are commonly used chromogens for peroxidase and alkaline phosphatase based immunostaining systems respectively. However, slides stained with these chromogens cannot be dehydrated and cleared using alcohol and xylene, due to their solubility in organic solvents. CC/Mount is an aqueous mounting medium with very high refractive index. When applied to the stained tissue sections, specimens can be permanently mounted without chromogens fading. Because of the superior refractive index of CC/Mount, tissues mounted in this medium look like dehydrated specimens. No coverslipping is required with CC/Mount. However, if coverslipping is desired, dried CC/Mount can be post-mounted by using an organic based mounting medium. Advantages of CC/Mount are numerous: no coverslip, no exposure to the organic fumes, permanent storage of slides and high resolution of tissue specimens. CC/Mount is compatible with chromogens like AEC, DAB, Fast Red, BCIP/NBT, BCIP/INT and fluorescent dyes like FITC and phycobiliproteins. The high pH of CC/Mount ensures increased stability of fluorescence.

### Elite PAP Pen

Catalog No.: K 039 Pen 1 each

Regulatory Status: IVD

Elite PAP pen provides a thin, film-like water repellent barrier when a circle is drawn around the specimen on the glass slide. This barrier creates the proper surface tension to hold antibody solution within the target area on the slide. This precludes the need to wipe around the specimen during the staining procedure. Since the reagent is guarded by the hydrophobic circle around the tissue, it minimizes the undesirable dilution of reagents with the wash buffer. This pen can be used for PAP, ABC, immunofluorescence, frozen sections and in situ hybridization procedures. Two specimens separated by two circles can be applied to the same slide.

### Elite Mini PAP Pen

Catalog No.: K 042 Pen 1 each

Regulatory Status: IVD

Elite PAP pen provides a thin, film-like water repellent barrier when a circle is drawn around the specimen on the glass slide. This barrier creates the proper surface tension to hold antibody solution within the target area on the slide. This precludes the need for wiping around the specimen during the staining procedure. Since the reagent is guarded by the hydrophobic circle around the tissue, it minimizes the undesirable dilution of reagents with the wash buffer. This pen can be used for PAP, ABC, immunofluorescence, frozen sections and in situ hybridization procedures. The Mini PAP pen is especially useful when working with multiple sections on a single slide because its tip is finer than the regular PAP pen.



Elite Pap Pen (K 039)

Mini Elite Pap Pen (K 042)

## Fluoromount™

Catalog No.: [K 024 Ready-to-Use 25ml](#)  
[K 024-200 Ready-to-Use 200ml](#)

Regulatory Status: IVD

Fluoromount™ is an aqueous mounting medium for cover slipping tissues stained with various fluorescent dyes. This product is compatible with FITC, phycoerythrin, phycocyanin and allophycocyanin. It can be used with other fluorescent markers such as Texas Red and rhodamine.

## Fluoromount/Plus™

Catalog No.: [K 048 Ready-to-Use 25ml](#)  
[K 048-200 Ready-to-Use 200ml](#)

Regulatory Status: IVD

Fluoromount/Plus™ is an aqueous-based mounting medium for applying coverslips to tissues stained with fluorescent dyes. This product is compatible with FITC, phycoerythrin, phycocyanin and allophycocyanin. It can also be used with other fluorescent markers such as Texas Red and rhodamine.

## Montage™ Hematoxylin

Catalog No.: [K 056-100AN 100ml](#)  
Regulatory Status: IVD

Hematoxylin is a histological staining reagent suitable for visualization of nuclei in tissue sections. Montage™ Hematoxylin, is designed for optimal performance when used together with the Montage 360™ System.



## 10X Peroxidase Diluent I

Catalog No.: [K 019 Concentrated 100ml](#)  
Regulatory Status: IVD

Peroxidase is one of the most widely used enzyme markers in immunoassay systems. Diluted peroxidase working reagent has a tendency to lose its activity after a few weeks even at 4-8°C. Peroxidase Diluent I is specially designed to solve this problem. This diluent will stabilize the peroxidase conjugate and will increase its shelf life to several years when stored at 4-8°C. Peroxidase Diluent I is free of serum and proteins. Peroxidase Diluent I contains 0.1% Proclin 300 as a preservative.

## 10X Peroxidase Diluent II

Catalog No.: [K 020 Concentrated 100ml](#)  
Regulatory Status: IVD

Peroxidase is one of the most widely used enzyme markers in immunoassay systems. Diluted peroxidase working reagent has a tendency to lose its activity after a few weeks even at 4-8°C. Peroxidase Diluent II is specially designed to solve this problem. This diluent will stabilize the peroxidase conjugate and will increase its shelf life for several years when stored at 4-8°C. Peroxidase Diluent II contains immunologically inert protein to further stabilize the protein-peroxidase conjugate. Peroxidase Diluent II contains 0.1% Proclin 300 as a preservative.

## Peroxidase Block

Catalog No.: [K 033 Ready-to-Use 50ml](#)  
Regulatory Status: IVD

Endogenous peroxidase activity has been observed in tissue sections during immunoperoxidase staining. If not properly suppressed, endogenous peroxidase can produce false signal as well as high background during the immunostaining. Treatment of tissue sections with Peroxidase Block prior to the application of primary antibody will suppress endogenous peroxidase activity.

## Primary Antibody Diluent

(With Background Reducing Component)  
Catalog No.: [K 004 Ready-to-Use 250ml](#)  
Regulatory Status: IVD

In order to obtain optimal staining, correct dilution as well as selection of appropriate diluent is critical. Ionic strength, pH of the environment and the presence or absence of detergents can affect the binding as well as the stability of the primary antibody. The optimal pH together with stabilizing proteins in Primary Antibody Diluent ensures the maximum stability of primary antibodies. Our Primary Antibody Diluent contains optimal concentrations of sodium chloride and detergents to prevent nonspecific binding and enable better penetration of primary antibodies. Primary Antibody Diluent is specifically designed for diluting primary antibodies for immunohistochemistry. Both, monoclonal and polyclonal antibodies can be diluted in this buffer.

## 10X Secondary Antibody Diluent

(With Background Reducing Component)  
Catalog No.: [K 022 Concentrated 100ml](#)  
Regulatory Status: IVD

In order to obtain optimal staining, correct antibody dilution as well as selection of appropriate diluent is critical. Ionic strength, pH of the environment and the presence or absence of detergents can affect the binding as well as the stability of the secondary antibody. The optimal pH together with stabilizing proteins in Secondary Antibody Diluent ensures maximum stability of secondary antibodies. Our Secondary Antibody Diluent contains optimal concentrations of sodium chloride and detergents to prevent nonspecific binding and enable better penetration of secondary antibodies. Secondary Antibody Diluent is specifically designed for diluting secondary antibodies for immunohistochemistry.

## TissueBond™ Reagent

Catalog No.: [K 013 Ready-to-Use 7ml](#)  
Regulatory Status: IVD

Proper tissue adhesion to the glass slides is critical in the immunostaining process. Improper adhesion of tissue sections can lead to poor quality staining or even loss of tissue sections during the process of immunostaining. White glue, albumen, chrome-gelatin and poly-L-lysine have been used as tissue adhesives; however, they can increase the background during the staining process. Since epitope recovery may require harsh treatment with proteolytic enzymes, microwave treatment or treatment with saponin etc., there is a need for a tissue adhesive which can irreversibly bind tissue sections to the glass without creating any background. Glass treated with TissueBond™ can be used for both paraffin as well as frozen tissue sections.

## Tissue Primer

Catalog No.: [K 054 100ml](#)  
Regulatory Status: IVD



Tissue Primer is a universal enzyme blocking reagent to use in horse radish peroxidase (HRP) and alkaline phosphatase (AP) based immunohistochemical staining procedures done on paraffin tissue sections, frozen tissue sections and cell smears to suppress nonspecific staining due to endogenous enzyme activity.

Visit us on LinkedIn.



# Special Stains

HISTOLOGY IS THE STUDY AND ANALYSIS OF STRUCTURE AND FUNCTION in biological tissues and cells. Specially formulated dyes and chemicals are used to give color to cellular tissue components for microscopic examination. Through this process diagnostic evaluations are made and patient therapies are determined.

DBS offers Special Stains ranging from Acid-Fast Bacteria Stain Kit to Warthin-Starry Stain Kit. The reagents are packaged for optimal staining quality. They are designed for usage right out of the box, minimizing setup time.

Each DBS Special Stain Kit has been quality assured and comes with complete instructions for use. ■

## FORMAT AND PACK SIZE:

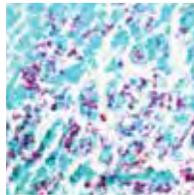
Each kit has sufficient reagents for 100 tests.

### A.F.B.

Catalog No.: [KT 001](#)

Regulatory Status: IVD

This kit stains acid-fast bacteria and tubercle bacilli of Mycobacterium genus in paraffin tissue sections. Tubercle bacilli and other acid-fast bacteria stain bright red and the background stains light green.



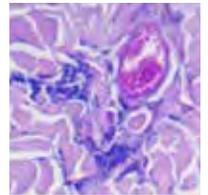
A.F.B. (KT 001).

### Combined Eosinophil-Mast Cell

Catalog No.: [KT 004](#)

Regulatory Status: IVD

This kit stains eosinophils and mast cells simultaneously in paraffin tissue sections. Mast cells stain bright blue, while eosinophils stain bright red.



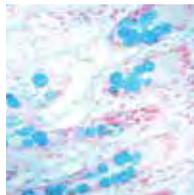
Combined Eosinophil-Mast Cell (KT 004).

### Alcian Blue, pH 1.0

Catalog No.: [KT 002](#)

Regulatory Status: IVD

This kit stains strongly sulfated mucosubstances. Strongly sulfated mucosubstances stain blue in paraffin tissue sections, while the nuclei stain pink to red and the cytoplasm and background stain pale pink.



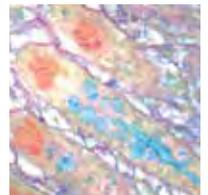
Human colon stained with Alcian Blue (KT 002).

### Colloidal Iron

Catalog No.: [KT 007](#)

Regulatory Status: IVD

This kit stains acid mucopolysaccharides in paraffin tissue sections. The acid mucopolysaccharides stain bright blue, while collagen stains shades of red.



Human intestine stained with Colloidal Iron stain (KT 007).

### Alcian Blue, pH 2.5

Catalog No.: [KT 003](#)

Regulatory Status: IVD

This kit stains acid mucins, carboxylated and sulfated mucosubstances (except strongly sulfated mucosubstances) in paraffin tissue sections. Acidic mucins, carboxylated and sulfated mucosubstances stain blue, while the nuclei stain pink to red and the cytoplasm and background stain pale pink.



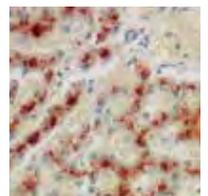
Human Colon Stained with Alcian Blue (KT 003).

### Copper

Catalog No.: [KT 033](#)

Regulatory Status: IVD

This kit stains copper deposits in paraffin tissue sections. The copper deposits stain light brown to red, while the nuclei stain blue.



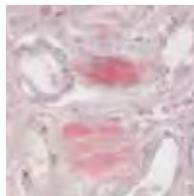
Copper (KT 033).

### Amyloid

Catalog No.: [KT 008](#)

Regulatory Status: IVD

This kit stains amyloid deposits in paraffin tissue sections. The amyloids stain pale pink to red, while the nuclei stain blue.



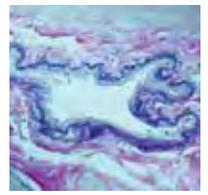
Human kidney amyloidosis stained with Amyloid (KT 008).

### Elastic

Catalog No.: [KT 012](#)

Regulatory Status: IVD

This kit stains elastic fibers in paraffin tissue sections. The elastic fibers stain black and collagen stains red, while the other tissue stains yellow.



Human uterus stained with elastic stain (KT 012).

## Fite

Catalog No.: [KT 013](#)

Regulatory Status: IVD

This kit stains Lepra bacillus in paraffin tissue sections. The Lepra bacillus stains red, while the background stains blue.

## Fontana-Masson

Catalog No.: [KT 014](#)

Regulatory Status: IVD

This kit stains argentaffin cells and melanin in paraffin tissue sections. The argentaffin cells and melanin granules stain brown to black, while the nuclei stain pink.

## Giemsa

Catalog No.: [KT 016](#)

Regulatory Status: IVD

This kit stains bone marrow cells, *Helicobacter pylori*, mast cells and certain microorganism in paraffin tissue sections. The erythrocytes stain gray, yellow or pink, *H. pylori* stain blue, mast cells stain dark blue with red granules, nuclei stain blue to violet and the cytoplasm stains light blue.



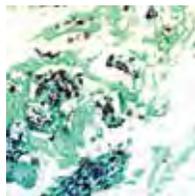
Human bone marrow stained with Giemsa kit (KT 016).

## G.M.S.

Catalog No.: [KT 015](#)

Regulatory Status: IVD

This kit stains fungi and *Pneumocystis carinii* in paraffin tissue sections. The fungi and *Pneumocystis carinii* stain gray to black, while the background stains green.



Human lung stained with G.M.S. kit (KT 015).

## Gram

Catalog No.: [KT 018](#)

Regulatory Status: IVD

This kit stains Gram-positive and Gram-negative bacteria in paraffin tissue sections. The Gram-positive bacteria stain blue, Gram-negative bacteria stain red, while other tissues and the nuclei stain yellow and red respectively.



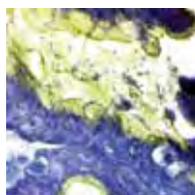
Gram positive and Gram negative bacteria stained with Gram stain (KT 018).

## H. Pylori Rapid Stain

Catalog No.: [KT 019](#)

Regulatory Status: IVD

This kit stains *Helicobacter pylori* bacteria in paraffin tissue sections. The *Helicobacter pylori* bacteria stain blue while the background stains pale blue.



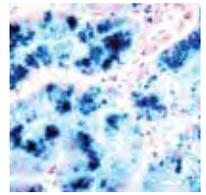
Human stomach stained with H. Pylori Rapid Stain (KT 019).

## Iron Stain

Catalog No.: [KT 021](#)

Regulatory Status: IVD

This kit stains ferric iron in paraffin tissue sections. The iron deposits stain blue, while the nuclei and other tissue stain red and pink respectively.



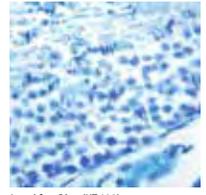
Human kidney stained with Iron stain (KT 021).

## Luxol Fast Blue

Catalog No.: [KT 022](#)

Regulatory Status: IVD

This kit stains myelin sheath and Nissl substance in paraffin tissue sections. The myelin fibers stain blue to greenish blue, while the cells stain pink to violet.



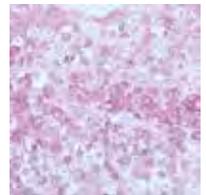
Luxol fast blue (KT 022).

## Methyl Green Pyronin

Catalog No.: [KT 023](#)

Regulatory Status: IVD

This kit stains DNA and RNA in paraffin tissue sections. The DNA stains blue-green to green and RNA stains pink to red.



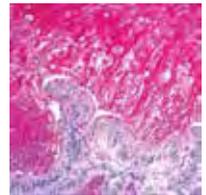
Human tonsil stained with Methyl Green Pyronin kit (KT 023).

## Mucicarmine

Catalog No.: [KT 024](#)

Regulatory Status: IVD

This kit stains epithelial mucins in paraffin tissue sections. The epithelial mucin stains pink to red, while the nuclei stain blue.



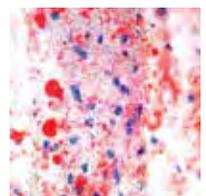
Human colon tumor stained with Mucicarmine kit (KT 024).

## Oil Red O

Catalog No.: [KT 025](#)

Regulatory Status: IVD

This kit stains fat cells and neutral fat in frozen tissue sections. The fat cells and neutral fat stains red, while the nuclei stain blue.



Frozen breast tissue stained with Oil Red O (KT 025).

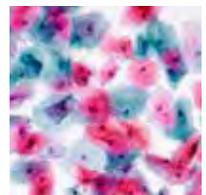
## Papanicolaou Stain

Catalog No.: [KT 038](#)

Regulatory Status: IVD

The Papanicolaou (PAP) Stain Kit is designed to differentiate between a variety of cells in vaginal smears for detection of vaginal, uterine and cervical cancer.

NEW



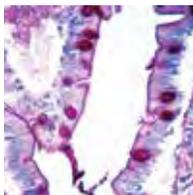
Human Cervical smear stained with PAP stain (KT 038).

**P.A.S.**

Catalog No.: KT 027

Regulatory Status: IVD

This kit stains fungi, glycogen and mucin in paraffin tissue sections. The basement membrane, fungi, glycogen and mucin stain pink to red, while the nuclei and other tissue stain blue and green respectively.



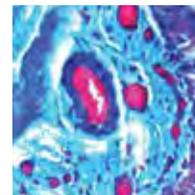
Human intestine stained with PAS stain (KT 027).

**Trichrome Stain**

Catalog No.: KT 034

Regulatory Status: IVD

This kit stains collagen and muscle in paraffin tissue sections. The muscle and intercellular fibers stain red, while the nuclei and collagen stain black and blue respectively.

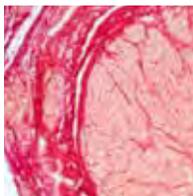


Masson's Trichrome (KT034).

**Picro Sirius Red Stain**

Catalog No.: KT 037

The Picro-Sirius Red Stain Kit (For Collagen) is intended for use in the histological visualization of collagen I and III fibers in addition to muscle in tissue sections.



Human uterus stained with Picro Sirius Red (KT 037).

**Von Kossa**

Catalog No.: KT 028

Regulatory Status: IVD

This kit stains calcium deposits in paraffin tissue sections. The calcium deposits stain black, while the nuclei and cytoplasm stain red and pink respectively.



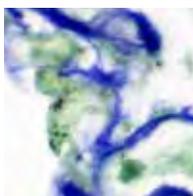
Bone tissue stained with Von Kossa stain (KT 028).

**Pneumocystis**

Catalog No.: KT 030

Regulatory Status: IVD

This kit stains *Pneumocystis carinii* in cytology smears as well as paraffin tissue sections. The *Pneumocystis carinii* stains violet to purple and the connective tissue stains blue to green.



Pneumocystis (KT 030).

**Warthin-Starry**

Catalog No.: KT 036

Regulatory Status: IVD

This kit stains *Helicobacter pylori*, *Spirochetes*, *Legionella pneumophila* and cat scratch fever bacteria in paraffin tissue sections. *Helicobacter pylori*, *Legionella pneumophila* stain dark brown, while *Spirochetes* and cat scratch fever bacteria stain black.



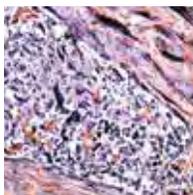
Human Gastric tissue stained with Warthin Starry kit (KT 036).

**P.T.A.H.**

Catalog No.: KT 029

Regulatory Status: IVD

This kit stains collagen, fibrin and striated muscle in paraffin tissue sections. The collagen stains brownish red to red, fibrin and muscle stain blue, while the nuclei stain dark blue.



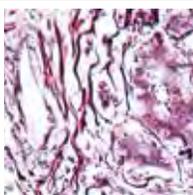
P.T.A.H. (KT 029).

**Reticulum**

Catalog No.: KT 031

Regulatory Status: IVD

This kit stains reticulum fibers in paraffin tissue sections. The reticulum fibers stain gray to black, while the nuclei and background stain pink to rose.



Human liver stained with reticulum stain (KT 031).

**Steiner**

Catalog No.: KT 035

Regulatory Status: IVD

This kit stains fungi, *Helicobacter pylori*, *Legionella pneumophila* and *Spirochetes* in paraffin tissue sections. The cat scratch fever, *Legionella pneumophila* stain dark brown, *Spirochetes*, *Helicobacter pylori* and fungi stain black, while the background stains yellow, tan or brown.



Human breast stained with Steiner kit (KT 035) showing *Treponema pallidum* staining.

DBS Special Stain kits have been optimized for fast performance, ease of use, and provide the highest accuracy attainable.

Visit us at: [dbiosys.com](http://dbiosys.com)



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## Our Mission

Providing clinically relevant anatomic pathology reagents to improve the practice of pathology.

## What We Do

Diagnostic BioSystems is committed to improving Immunohistochemistry (IHC) staining one slide at a time. We focus on improving the quality of IHC staining through standardized instrumentation, detection chemistries and advanced multiplex solutions. DBS has more than twenty years experience in IHC assay development to help pathologists solve their most difficult diagnostic clinical questions.

## Manufacturing Accreditations

Diagnostic BioSystems maintains the highest quality standards and is committed to customer service and support. This commitment is built on a quality system foundation.

Diagnostic BioSystems is an FDA registered medical device manufacturer, operating under FDA 21CFR Part820 Quality System Regulations and is a California Department of Public Health (CDPH) licensed Medical Device Manufacturing facility.

The facility is also certified under ISO 9001:2008 Quality Management System International Standards. We manufacture IVD/CE marked medical devices for use in the European market.

[www.dbiosys.com](http://www.dbiosys.com)



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