



Novel Antibodies for Pancreatic Cancer

Pancreatic cancer is the third leading cause of cancer related death in the United States surpassing breast cancer. It is expected to become the second by 2020, surpassing colon cancer.

Everyday, more than 1,257 people worldwide will be diagnosed with pancreatic cancer. In nearly every country, pancreatic cancer is the only major cancer with a single digit five year survival rate of 2 - 9%.

PANCREATIC CANCER MARKERS

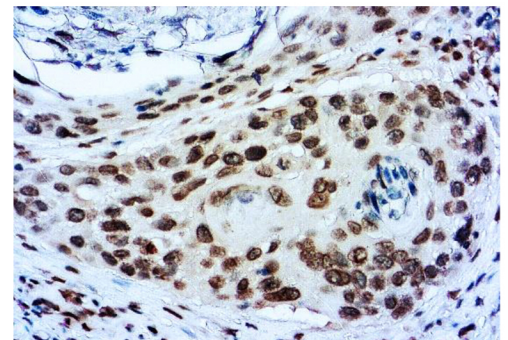
Novel Antibodies Including
Anti- Smad4, Anti- β -Catenin,
Anti-E-Cadherin, Anti-
Pancreatic Polypeptide and Anti-
chromogranin A available
for Pancreatic Cancer

DMarkers				
Biomarker	Extrahepatic pancreatobiliary	Intestinal	Intrahepatic cholangiocarcinoma	Hepatocellular carcinoma
CK19	+	+	+	-
CK20	-/+	+/-	-	-
MUC2	-	+/-	-	-
MUC5AC	+/-	-/+	-	-
CA19-9	+	+	+/-	-
mCEA	+/-	+	-	-
CA125	+/-	-/+	-	-
Smad4	-/+	+	+	+

Smad4

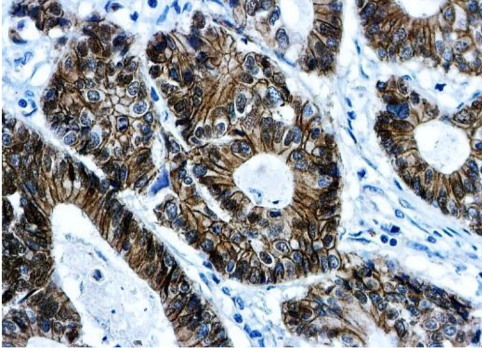
- Is useful in differentiating high-grade pancreatic intraepithelial neoplasia and invasive pancreatic adenocarcinoma from benign/reactive pancreas
- Loss of SMAD4 may be indicative of a pancreatic primary tumor.
- Loss of SMAD4 expression in tumors has also been shown to affect cancer progression and therapy such as reduced response to adjuvant chemotherapy.

DBS' comprehensive Pancreatic panel includes novel rabbit monoclonal and mouse monoclonal antibodies. These antibodies ensure sensitivity and specificity of IHC tests. As a result, pathologists and oncologists can have rapid, precise results and an accurate diagnosis to determine an effective treatment for their patients.

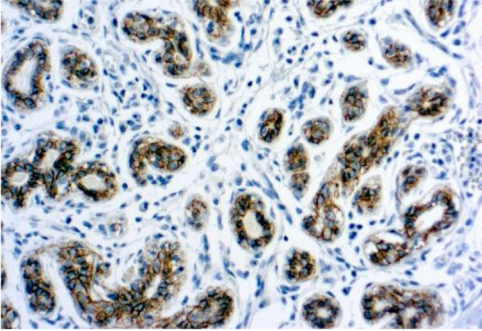


Pancreas carcinoma stained with anti-Samd4 using DAB

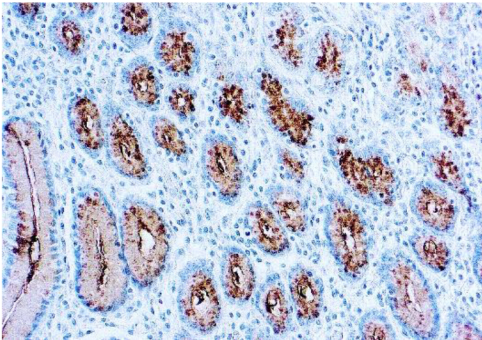




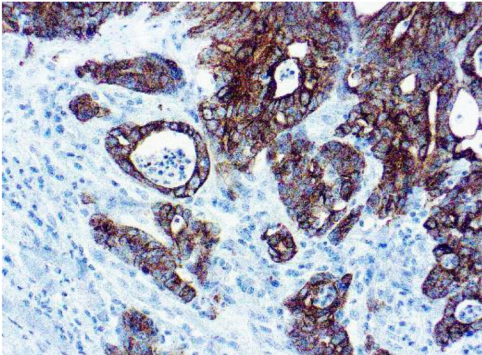
Large intestine stained with anti-β-Catenin using DAB



Breast Ca. stained with anti-E-Cadherin using DAB



Stomach carcinoma stained with anti- Mucin 5AC/Gastric Mucin using DAB



Colon carcinoma stained with anti-CK19 using DAB

Catenin, β (Cat. No.: RP080 PDR060)

Clone: Poly (R)

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

E-Cadherin (Cat. No.: Mob 550 PDM 182) clone: SPM471 (M)

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. It's useful to distinguish Solid pseudopapillary neoplasm of the pancreas (-) versus other pancreatic neoplasms (+)

Mucin 5AC/Gastric Mucin (Cat.No:Mob357,PDM163)

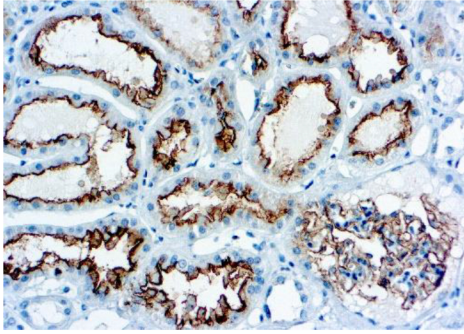
Clone: 45M1 (M)

This antibody recognizes with a 1000 kDa protein and recognizes the peptide core of gastric mucin M1. IHC positive stain on Stomach (foveolar epithelium of body and antrum), tracheobronchial mucosa, endometrium (mucinous metaplasia, eosinophilic change / metaplasia, surface syncytial change, ciliated change in 52%)

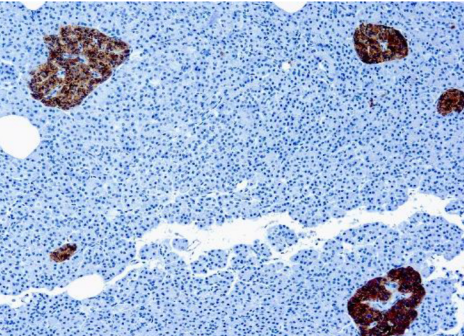
Cytokeratin 19 (Cat. No.: Mob274, PDM192)

Clone: A53-B/A2.26 (M)

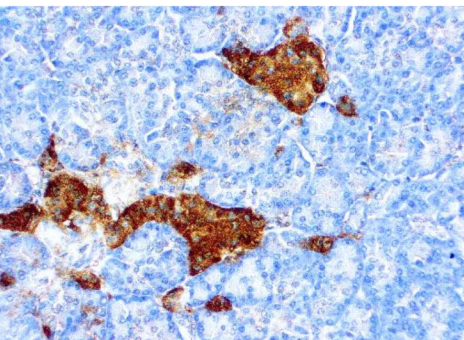
This antibody is specific to a 40 kDa protein, cytokeratin 19. Its epitope maps between amino acids 312-335. This antibody reacts with MCF-7 cells, which are known to contain cytokeratin 19. IHC positive stain in pancreatic ducts (+) and negative in pancreatic islets (-). It's often coexpressed with CK7.



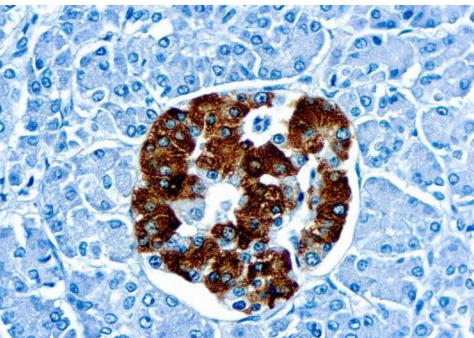
Renal Cell Ca. stained with anti-CD10 using DAB



Pancreas tissue stained with anti-Chromogranin A using DAB



Pancreas. stained with anti-Pancreatic Polypeptide using DAB



CD10 (Cat. No.: RMAB037, RMPD037) clone: EP195 (RM)

CD10 is useful to Confirm diagnosis of solid and papillary neoplasm (CD10+). It's important biomarker to differentiates mucinous cystic neoplasms (CD10+ / CK20+) from intraductal papillary mucinous neoplasm of branch duct type (CD10- / CK20-).

Also (CD10) Clone: 56C6 Catalog No.: Mob240 PDM107

Chromogranin A (Cat. No.: RP008 PDR061)

Clone: Poly (R)

This antibody reacts with human chromogranin A in the neuroendocrine cells and neural tissues. IHC positive stain on pancreas (Islets) and acinar cells. In pancreatic solid pseudopapillary neoplasm has IHC negative stain. (occasionally focal staining)

Also (Chromogranin A) Clone: LK2H10 Catalog No.: Mob048 PDM067

Also (Chromogranin A) Clone: SP12 Catalog No.: RMAB015 RMPDM015

Pancreatic Polypeptide (Cat. No.: RP030) Clone: Poly (R)

This antibody reacts with pancreatic polypeptide (PP). It stains the periphery of islets, exocrine pancreatic parenchyma and the epithelium of small and medium sized ducts and acinar cells. PP cells can be identified in pancreatic polypeptide cell hyperplasia (PPCH), PPomas (tumors composed exclusively or mostly of pancreatic polypeptide cells) and mixed pancreatic neuroendocrine tumor.

Insulin (Cat. No.: Mob234, PDM270) clone K36aC10 (M)

This antibody recognizes purified insulin from the pancreas of human, as well as proinsulin from human. Tumor secretes insulin (analogous to beta cell production in normal pancreatic islets) and thus clinical hyperinsulinemic hypoglycemia is required for this diagnosis Majority of insulinomas are small (< 2 cm) and benign Multiple insulinomas associated with MEN1.