

# Instructions For Use KT 038-IFU

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# Papanicolaou (PAP) Stain Kit

#### **Description and Principle**

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. In addition, this procedure is valuable for staining a variety of other bodily secretions and cell smears. The procedure was developed in the early 1940's by George Papanicolaou.

Papanicolaou (PAP) Stain Kit utilizes a combination of stains visualize nuclear and cytoplasmic detain of cytology specimens. Nuclei are rapidly and progressively stained by a Mayer's hematoxylin solution. Orange G in an alcohol solution with phosphotungstic acid stains keratinized cells bright orange. EA-50 stain solution is a polychrome cytoplasm stain that stains cells varying shades of pink and blue/green due to differences in dye penetration rates.

### **Expected Results**

 Nuclei:
 Blue

 High Keratin Cells:
 Orange

 Superficial Cells:
 Pink

 Erythrocytes:
 Dark Pink

 Parabasal Cells:
 Blue/Green

 Intermediate Cells:
 Blue/Green

Metaplastic Cells: May contain both Blue/Green and

Pink.

Kit ContentsStorage1. Hematoxylin, Mayer's (Lillie's Modification)15-30°C2. OG-6 Solution15-30°C3. EA-50 Stain Solution15-30°C

# Suggested Controls (not provided)

Gynecological Smear, Any Superficial Cell Smear.

#### **Uses/Limitations**

For In-Vitro Diagnostic use only. Do not use if reagents become cloudy or precipitate Do not use past expiration date.

Use caution when handling reagents.

Non-Sterile

Intended for FFPE sections cut at 5-10  $\mu m. \,$ 

This procedure has not been optimized for frozen sections.

Frozen sections may require protocol modification.

#### **Storage**

Store all components at room temperature (15-30°C).

#### **Safety and Precautions**

Please see current Safety Data Sheets (SDS) for this product and components GHS classification, pictograms, and full hazard/precautionary statements. If there is any serious incident that has occurred in relation to the device, please contact the manufacturer: Diagnostic

BioSystems Technical Support at (925) 484-3350, extension 2 or techsupport@dbiosys.com. If required, please report to the Competent Authority of the Member State in which the user and/or patient is established.

#### Procedure:

1. Place slide in 95% alcohol for 5 minutes.

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- 2. Place slide in 70% alcohol for 5 minutes.
- 3. Place slide in distilled water for 2 minutes.
- 4. Apply Hematoxylin, Mayer's (Lillie's Modification) for 5 minutes.



Oral squamous cells viewed at 40X stained with the Papanicolaou (PAP) Stain Kit.

- 5. Rinse slide 1 time in distilled water to remove excess stain.
- 6. Rinse slide in tap water for 2 minutes.
- 7. Rinse slide in 2 changes of distilled water.
- 8. Dip slide several times in 95% alcohol and blot excess off.
- 9. Apply OG-6 Stain Solution for 2 minutes.
- 10. Rinse slide gently using absolute alcohol.
- 11. Apply EA-50 Stain Solution for 3 minutes.
- 12. Rinse slide gently using absolute alcohol.
- 13. Quickly dehydrate slide in 3 changes of absolute alcohol.
- 14. Clear slide and mount in synthetic resin.

# References

1. Papanicolaou, G.N. Atlas of Exfoliative Cytology, Harvard University Press, Cambridge, 1954.









