

#### **Intended Use**

Ultra-Fast Papanicolaou Staining kit.

### **Summary**

The original staining procedure was developed by George N. Papanicolaou who modified his hormonal status stain in order to visualize cancer cells. The three main advantages of this staining procedure are: (1) Good definition of nuclear detail. (2) Cytoplasmic clarity and transparency. (3) Indication of cellular differentiation of squamous epithelium. It is a polychrome staining method which depends on degree of cell maturity and cellular metabolic activity.

**ULTRA-PAP** is a modification of the classical PAP Stains to give an Ultra-Fast Papanicolaou Stain with a formulation which reduces the time needed for staining along with a simplified procedure. This Ultra-Fast procedure gives clear nuclear and cytoplasmic staining.

# Reagents / Contents (for 250 Smears)

ULTRA-PAP Nuclear Stain	100 mL
ULTRA-PAP Cyto-Stain A	55 mL
ULTRA-PAP Cyto-Stain B	55 mL
Scotts Tap Water Buffer	100 mL
Micro-Fix Fixative Spray	2 x 50 mL
Dehydrant (IPA)	2 x 100 mL
Xylene	2 x 100 mL
D.P.X. Mounting Medium	15 mL

## **Preparation of working Cyto-Stain**

Prepare working Cyto-Stain by adding equivalent volume of Cyto-stain A and Cyto-Stain B (1:1 ratio) in the bottle provided with the kit based on the requirement, as it is not stable for a longer period.

# **Appearance**

Ultra-PAP Nuclear Stain : Maroon purplish solution Ultra-PAP Cyto

Stain A : Orange solution

Ultra-PAP Cyto Stain B : Dark greenish solution Scott's Tap Water

Buffer : Clear, colorless solution
Micro Fix Fixative Spray : Clear, colorless solution
Dehydrant (IPA) : Clear colourless solution
Xylene : Clear, colourless solution
D.P.X. Mounting Medium : Clear, colourless thick solution

### **Storage and Stability**

Contents are stable at Room Temperature (preferably below 25°C) up to the stated expiration date. Store in a cool dry place away from sunlight. Keep all the bottles tightly closed.

## Materials required but not provided

Smear preparations of various bodily secretions; gynaecological smears (PAP smears), sputum, brushings, washings, urine, cerebrospinal fluid, abdominal fluid, pleural fluid, synovial fluid, seminal fluid, fine needle aspiration material, tumour touch samples, or other materials containing cells.

### **Type of Specimen**

Clinical smears like FNA, Vaginal Impression, Bone marrow, Body fluids and Sputum should be fixed with the Micro-Fix Fixative provided. For tissues, the use of Formal saline is recommended, 5% for Soft Tissues and 10% for Normal Tissues.









#### **Procedure**

- 1. Hydrate the fixed smear with 10 passes under running tap water. Blot off excess water.
- 2. Dip in Nuclear Stain for 45 sec. Wash under running tap water.
- 3. Add 3 drops of Scotts Tap Water Buffer.
- 4. Wash in running tap water after 10 seconds until dye traces are removed. Blot off excess water.
- 5. Dip in Dehydrant 30 sec. (Two changes)
- 6. Dip in Working Cyto-Stain 15 sec. Wash in running tap water. Blot off excess water.
- 7. Dip in Dehydrant for 30 sec. Remove and allow to dry.
- 8. Dip in Xylene (Two changes if required) and allow to dry.
- 9. Add DPX Mountant and cover with a cover slip and observe under microscope.

Note: In case Coplin jars are not used one can flood the slide with a few drops of stains as required.

# **Interpretation of Results**

Nuclei are stained blue while the cytoplasm displays various shades of blue, orange, pink or red. The given staining times are the suggested times and can be varied to suit individual colour preferences.

#### Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.





