

# **GILLS 2 HAEMATOXYLIN**

Product Code PRC/13/1

Pack sizes 1 litre, 2.5 litres5 litres

Manufactured by Pioneer Research Chemicals Ltd.

## Haematoxylin staining solution for nuclear staining in histology (Haematoxylin and Eosin) and cytology (Papanicolaou Technique).

#### Storage:

Store the staining solution at  $+15^{\circ}$ C to  $+25^{\circ}$ C. Store in the dark. Keep upright.

#### Shelf Life:

Shelf life unopened = 1 year from date of manufacture. Shelf life opened = 2 months. The solution must be used by the expiry date. The bottle must be kept closed.

### Warnings and precautions:

Observe the hazard classifications on the label. Safety data sheet available on request. Follow laboratory Health & Safety guidelines for COSHH and biological risks.

#### **Composition:**

Haematoxylin 0.28% w/w. Aluminium Sulphate 3.29% Plus other ingredients which may influence results.

## Sample Material:

Paraffin sections, cryo sections, gynaecological and nongynaecological specimens, e.g. sputum, urine, FNAB, body effusions, lavages.

## **Procedure:**

For professional use only. Staining must be carried out by trained personnel. Staining solutions should be filtered before use. Dilution of the stain is not needed and may reduce sample results.

## Suggested staining protocols: Haematoxylin and Eosin (regressive):

- 1. Deparaffinize to water or fix and hydrate frozen sections.
- 2. Stain in Gills Haematoxylin for up to 10 minutes.
- 3. Rinse slides in running tap water.
- 4. Differentiate in acid alcohol. Rinse in running tap water.
- 5. Blue in Scott's Tap Water Substitute.
- 6. Rinse in running tap water.
- 7. Counterstain in aqueous eosin solution for 30 seconds 3 minutes.
- 8. Dehydrate, clear and mount.

### **Results:**

Keratohyalin, nuclei, cytoplasmic RNA, some calcium salts, urates, bacteria (weakly) blue/black Connective tissue elements: eg muscle, keratin, fibrin, collagen, amyloid red/pink Red blood cells red/pink

## Papanicolaou Staining Technique:

Manual staining (regressive):

- 1. Wash with 96% alcohol.
- 2. Wash with 80% alcohol.
- 3. Wash with 70% alcohol.
- 4. Wash with 50% alcohol.
- 5. Wash with distilled water.
- 6. Stain in Gills Haematoxylin solution for 2 minutes.
- 7. Rinse in tap water for 10 seconds.
- 8. Rinse in acid alcohol for 10 -30 seconds.
- 9. Rinse in tap water for 10 seconds.
- 10. Rinse in ammoniated water for 1 minute.
- 11. Rinse under weak stream of tap water for 3 minutes.
- 12. Wash with 70% alcohol.
- 13. Wash with 80% alcohol.
- 14. Wash with 96% alcohol.
- 15. Stain in OG6 solution for 3 minutes.
- 16. Wash with 96% alcohol.
- 17. Wash with 96% alcohol.
- 18. Stain in EA 50 for 3 minutes.
- 19. Dehydrate with 96% alcohol.
- 20. Dehydrate with 96% alcohol.
- 21. Dehydrate with absolute alcohol for 5 minutes.
- 22. Dehydrate with Xylene for 3 minutes.
- 23. Clear with Xylene for 3 minutes.
- 24. Clear with Xylene for 3 minutes.
- 25. Dehydrate, clear and mount.

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blue/green

If a staining machine is used, follow the instructions provided by the equipment manufacturer.

### Notes:

All times are given as a guide. Personal preference may influence staining protocol. Staining solutions may lose strength with age/use and should be replaced regularly. Do not add new stock to depleted solutions.

# Instructions for disposal:

Used solutions must be disposed of as special waste in accordance with local guidelines.

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