VitroView™ Gill Hematoxylin II Solution
SKU: VB-3050G2

Description

Hematoxylin is oxidized to hematein, which is complexed with aluminum mordant to form a dye-metal complex. This complex selectively binds to nuclear chromatin and nucleic acids. Following rinsing and bluing, cell nuclei develop a permanent blue to blue-purple coloration while cytoplasmic structures remain available for counterstaining.

Gill Hematoxylin II is formulated as a progressive stain, allowing the desired staining intensity to be controlled primarily by immersion time rather than by differentiation.

VitroView™ Gill Hematoxylin II Solution is a ready-to-use, double-strength progressive nuclear stain designed for use in histology, cytology, and immunohistochemistry (IHC). The formulation produces well-defined blue to blue-purple nuclear staining with minimal background and is suitable for routine Hematoxylin and Eosin (H&E) staining of paraffin-embedded tissues.

Gill Hematoxylin II provides greater staining intensity than Gill Hematoxylin I while requiring little or no differentiation under standard progressive staining protocols.

Application

- Progressive nuclear staining of formalin-fixed, paraffin-embedded (FFPE) tissue sections
- Routine Hematoxylin and Eosin (H&E) staining
- Cytology staining where increased nuclear intensity is desired
- Counterstaining in immunohistochemistry (IHC)

Contents

VB-3050G2 Gill Hematoxylin II Solution - 500 ml

Storage

Room temperature.

Protocol

H&E Stain for paraffin sections:

1. Deparaffinize in xylene I for 6 minutes and II for 6 minutes.
2. Rehydrate
    a. Ethanol 100% (2 minutes)
    b. Ethanol 100% (2 minutes)
    c. Ethanol 95% (2 minutes)
    d. Ethanol 95% (2 minutes)
    e. Ethanol 70% (2 minutes)

3. Rinse in tap water (2 minutes).
4. Place in Gill Hematoxylin II Solution for 2-4 minutes (adjust according to tissue type and desired intensity).
5. Rinse in tap water for 5 min with 3 changes. Or Bluing reagent for 30–60 seconds.
6. Rinse with water for 1 min.
7. Place in 95% Ethanol for 1 minute (DO NOT RINSE).
8. Place in Eosin for 1 min 30sec.
9. Dehydrate with 2 changes of 95% Ethanol and 2 changes of 100% Ethanol (2 minutes per change).
10. Clear with 3 changes of xylene (5 minutes per change)
11. Mount coverslip onto glass slide with Permount or some other suitable organic mounting medium.

H&E Stain for frozen sections:

1. Frozen sections are fixed in acetone at -20 °C for 3 min or 80% Methanol at 4°C for 5 min
2. PBS 1× 10 min.
3. Rinse in tap water (2 minutes).
4. Follow steps 4-11 above.

For Immunohistochemistry (IHC) Counterstain:

Following the completion of chromogen development:

1. Rinse slides thoroughly.
2. Immerse in Gill Hematoxylin II for 30–90 seconds.
3. Rinse with water.
4. Blue nuclei.
5. Dehydrate, clear, and mount.

Counterstaining time may be adjusted depending on tissue type and desired nuclear intensity.

Note: This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Precautions: Handle with care. Avoid contact with eyes, skin and clothing. Do not ingest. Wear gloves.