VitroView™ Harris Hematoxylin Solution
SKU: VB-3050H

Description

Hematoxylin is oxidized to hematein, which combines with an aluminum mordant to form the active dye-metal complex. The positively charged aluminum-hematein complex binds to negatively charged phosphate groups within nuclear DNA, staining cell nuclei blue to blue purple after differentiation and bluing.

Because Harris Hematoxylin is generally used regressively, excess stains are removed with acid alcohol before bluing, producing crisp nuclear morphology and excellent chromatin definition.

VitroView™ Harris Hematoxylin Solution is a ready-to-use alum hematoxylin formulated for nuclear staining in histology, cytology, and selected immunohistochemistry (IHC) applications. It produces sharp blue to blue-purple nuclear staining with excellent chromatin detail and is widely used in routine Hematoxylin and Eosin (H&E) staining.

Harris Hematoxylin is traditionally used as a regressive stain, in which tissue sections are intentionally overstained and then differentiated with acid alcohol to achieve optimal nuclear contrast. The solution may also be used as a progressive stain when shorter staining times are employed.

Application

- Nuclear staining of formalin-fixed paraffin-embedded (FFPE) tissue sections
- Routine Hematoxylin and Eosin (H&E) staining
- Cytological specimen staining
- Selected special staining procedures
- Immunohistochemical counterstaining (when validated)

Contents

VB-3050H VitroView™ Harris Hematoxylin 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 Harris Hematoxylin Solution for 2-4 minutes.
5. Rinse in tap water for 2 min with 2 changes. Or Rinse in running tap water for 2 min.
6. Differentiate in acid alcohol: 1–5 quick dips or until background clears.
7. Rinse in tap water for 5 min with 3 changes. Or Bluing reagent for 30–60 seconds.
8. Rinse thoroughly with distilled or tap water.
9. Place in 95% Ethanol for 1 minute (DO NOT RINSE).
10. Place in Eosin for 1 min 30sec.
11. Dehydrate with 2 changes of 95% Ethanol and 2 changes of 100% Ethanol (2 minutes per change).
12. Clear with 3 changes of xylene (5 minutes per change)
13. 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 4-13 above.

For Immunohistochemistry (IHC) Counterstain:

Following the completion of chromogen development:

1. Rinse slides thoroughly.
2. Immerse in Harris Hematoxylin for 20–60 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.