VitroVivo Biotech
Make Tissues, Cells, Genes and Molecules Visible

VitroView™ Carazzi Hematoxylin Solution
SKU: VB-3050C

Description

Hematoxylin is oxidized to hematein, which combines with an aluminum mordant to form a dye-metal complex. This complex binds selectively to negatively charged nucleic acids within cell nuclei. Following rinsing and bluing, nuclei develop a permanent blue to blue-purple coloration with excellent chromatin definition.

Carazzi Hematoxylin is formulated as a progressive stain, allowing optimal nuclear staining to be achieved without routine differentiation. Bluing converts the reddish-purple hematoxylin complex into a stable blue nuclear stain.

VitroView™ Carazzi Hematoxylin Solution is a ready-to-use progressive alum hematoxylin formulated for nuclear staining in histology, cytology, frozen section diagnostics, and immunohistochemistry (IHC). The formulation provides crisp blue to blue-purple nuclear staining with excellent chromatin detail and minimal background staining.

Carazzi Hematoxylin is chemically ripened using an oxidizing agent and does not require aging before use. As a progressive stain, it generally eliminates the need for acid alcohol differentiation when used under recommended staining conditions. It is particularly valued for producing clean nuclear detail with minimal staining of cytoplasmic structures.

Application

- Progressive nuclear staining of formalin-fixed paraffin-embedded (FFPE) tissue sections
- Routine Hematoxylin and Eosin (H&E) staining
- Frozen section staining
- Cytological specimen staining
- Counterstaining following immunohistochemical staining procedures

Contents

VB-3050C VitroView™ Carazzi 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 Carazzi Hematoxylin Solution for 3-5 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 completion of chromogen development:

1. Rinse slides thoroughly.
2. Immerse in Carazzi 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.