



VitroView™ Colloidal Iron Stain Kit

SKU#: VB-3027

Description

Colloidal Iron Stain Kit is designed for the histochemical demonstration of carboxylated and sulfated mucosubstances, including acidic mucopolysaccharides and glycoproteins, in tissue sections. At low pH, colloidal ferric ions bind preferentially to negatively charged carboxylated and sulfated groups within the tissue. Following removal of unbound reagent, the bound iron is visualized by the Prussian blue reaction, producing a blue coloration at sites containing acidic mucosubstances. The kit is suitable for use with well-fixed, paraffin-embedded tissue sections and is applicable to routine histopathological and research applications.

Key Kit Features

- High Versatility: Compatible with any properly fixed, paraffin-embedded tissue samples.
- Sharp Contrast: Delivers bright blue staining against a clean background for easy evaluation.
- Reliable Results: Streamlined protocol ensures consistent and reproducible staining runs.

Kit Contents

VB-3027-1	Acetic Acid Solution (12%) -----	500ml
VB-3027-2	Hydrochloric Acid Solution (3%) -----	125ml
VB-3017-3	Potassium Ferrocyanide Solution (3%) -----	125ml
VB-3027-4	Colloidal Iron Stock Solution-----	125ml
VB-3027-5	Van Gieson's Solution-----	125ml

Storage

Store at room temperature

Protocol

Thing to do before staining

1. Working Colloidal Iron Solution.
 - Acetic Acid Solution (12%) 5 ml
 - Distilled Water 15 ml
 - Colloidal Iron Stock Solution 20 ml
 Mix well.
2. Working Iron Stain Solution
 - Hydrochloric Acid Solution (3%) 20 ml
 - Potassium Ferrocyanide Solution 20 ml
 Mix well

Procedures

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

- d. Ethanol 95% (1 minutes)
- e. Ethanol 70% (1 minutes)
3. Rinse in DI water (2 minutes).
4. Cover tissue section with Acetic Acid Solution (12%) for 30 seconds.
5. Place slide in Working Colloidal Iron Solution for 30 minutes with occasional gentle agitation. Use once and discard.
6. Rinse thoroughly in 3 changes of Acetic Acid Solution (12%) for 2 minutes each.
7. Stain slide in Working Iron Stain Solution for 2-10 minutes with occasional gentle agitation. Use once and discard.
8. Rinse in 3 changes of distilled water.
9. Stain tissue section with Van Gieson's Solution for 30 seconds.
10. Dehydrate in 3 changes of absolute alcohol.
11. Clear with 3 changes of xylene (5 minute per change)
12. Mount coverslip onto glass slide with Permount or some other suitable organic mounting medium.

Expected Results:

- Acid mucopolysaccharides and sialomucins-----deep blue
- Collagen-----red

Control Tissue: Small intestine or Colon.

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.