



VitroView™ Fontana-Masson Stain Kit
SKU No. VB-3020

Introduction

This kit is designed to identify argentaffin granules and melanin in tissues. Melanin is a nonlipid, nonhematogenous pigment. It is a brown-black pigment present normally in the hair, skin, retina, iris and certain parts of the central nervous system. Argentaffin granules are found in carcinoid tumors.

Kit Components

- VB-3020-1 Silver Nitrate Solution-----40ml
- VB-3020-2 Concentrated Ammonium Hydroxide-----20ml
- VB-3020-3 Gold Chloride Solution-----100ml
- VB-3020-4 Sodium Thiosulfate Solution-----100ml
- VB-3020-4 Nuclear-Fast Red Solution----- 100ml

Storage

Store Silver Nitrate Solution and Gold Chloride Solution at 2-8°C. Others at room temperature

Things to do before starting

Prepare fresh Working Ammoniacal Silver Solution prior to use: Using chemically cleaned glassware or new plastic ware, add 8 ml of 10% Silver Nitrate Solution to 24ml distilled water and mix. Next add, drop by drop, Concentrated Ammonium Hydroxide; the solution initially turns dark brown and then gradually becomes transparent with a layer of fine sediment. Solution is ready to use when all sediment is dissolved.

Protocol

- 1a. For formalin-fixed, paraffin-embedded (FFPE) tissue sections: Sides need to be deparaffinized and rehydrated.
 - a) Xylene (6 minutes)×2
 - b) Ethanol 100% (2 minutes) ×2
 - c) Ethanol 95% (2 minutes)×2
 - d) Ethanol 70% (2 minutes) ×1
- 1b. For Frozen Sections: fix frozen sections in 10% formalin for 30 minutes.
2. Rinses in distilled water 2min×3.
3. Place slide in Working Ammoniacal Silver Solution and incubate in a 58° to 60° C water bath until section becomes yellowish-brown. (NOTE: Melanin typically stains in approximately 30 minutes; Argentaffin typically stains in approximately 50 to 60 minutes)
4. Rinse slide gently in distilled water
5. Place slide in 0.1% Gold Chloride for 1 minute. (Check using microscope for correct tone.)
6. Rinse slide gently through 2 changes of distilled water.
7. Place slide in 5% Sodium Thiosulfate for 1 to 2 minutes.
8. Rinse slide gently in running tap water for 2 to 3 minutes.
9. Place slide in Nuclear-Fast Red Stain Solution for 5 minutes.
10. Rinse slide in gently running tap water.
11. Dehydrate with 2 changes of 95% Ethanol and 2 changes of 100% Ethanol (2 minute per change).
12. Clear with 3 changes of xylene (5 minute per change) and coverslip with Permount or other suitable organic mounting medium.

Control Tissue: Any paraffin embedded tissue that contains Hair Follicles or Skin for Melanin.Small Intestine for Argentaffin.

Expected results

- Melanin and argentaffin granules-----Brown to black.
- Nuclei-----Pink

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 in chemical hood. Avoid contact with eyes, skin and clothing. Do not ingest. Wear gloves.