VitroView™ Rapid Melanin Bleach Kit for Tissue Sections

SKU#: VB-3038

Description

The VitroView™ Rapid Melanin Bleach Kit for Tissue Sections is designed for the selective removal of melanin pigment from tissue sections, enhancing the clarity of histological and immunohistochemical staining. Melanin, a naturally occurring pigment, can obscure cellular details and interfere with diagnostic evaluation. This kit utilizes an oxidative bleaching process involving Potassium Permanganate ($KMnO_4$) followed by Oxalic Acid ($C_2H_2O_4$) to effectively decolorize melanin while preserving tissue morphology and antigenicity.

The two-step bleaching protocol ensures optimal results:

- Oxidation with Potassium Permanganate – Disrupts melanin granules.
- Clearing with Oxalic Acid – Neutralizes residual permanganate and removes oxidation byproducts.

This method is particularly useful in dermatopathology, ocular pathology, and melanoma research, where melanin interference must be eliminated for accurate microscopic analysis. The kit provides a standardized, fast and reliable approach to melanin removal without compromising tissue integrity.

Kit Contents

Sku#	Reagent Name	Volume (ml)
VB-3038-1	Potassium Permanganate Solution	250 ml
VB-3038-2	Oxalic Acid Solution	250 ml

Storage

Store at room temperature.

Protocol

1. Deparaffinization & Rehydration:

- Xylene I: 6 minutes
- Xylene II: 6 minutes
- 100% Ethanol: 2 minutes (×2)
- 95% Ethanol: 2 minutes (×2)
- 70% Ethanol: 2 minutes
- Rinse in tap water for 2 minutes.

2. Melanin Bleaching

- Incubate slides in Potassium Permanganate Solution for 3–5 minutes.
  Critical Note: Prolonged incubation may improve pigment removal but increases the risk of tissue detachment.For best results, use positively charged or high quality adhesive slides to minimize detachment.
- Immediately transfer slides to Oxalic Acid solution for 1–2 minutes, or until the brown discoloration completely disappears.
- Rinse under running tap water for 2 minutes.

3. Post-Bleaching Staining

- Proceed with histochemistry (H&E, special stains) or immunohistochemistry (IHC/IF).
- For IHC/IF: Bleaching may reduce antigen sensitivity; optimize antibody dilutions or retrieval methods if needed.

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.