

VitroViewTM Modified Gomori's Trichrome Stain Kit for Frozen Section SKU No. VB-3014

Introduction

Trichrome stain is one of the most highly utilized special stains in the histopathology laboratory. Most of common uses for trichrome staining are liver biopsies, renal biopsies, dermatopathology, cardiac biopsies and muscle and nerve biopsies. Gomori's trichrome is a one-step staining procedure that combines plasma stain (chromotrope 2R) and connective fiber stain (fast green FCF) in a phosphotungstic acid solution to which glacial acetic acid has been added. This kit is designed for frozen tissue section.

Kit Components

VB-3014-1	Gomori's Trichro	ome solution	250	ml
VB-3014-2	Harris Hematoxy	lin solution-	250	ml

Storage

Room temperature.

Protocol

- 1. Sample preparation: Cut 10 16 micron ($12~\mu m$) sections in a cryostat from snap frozen tissue. Fixation is not needed.
- 2. Immerse sections in Harris Hematoxylin for 5 minutes.
- 3. Wash with tap water until the water is clear.
- 4. Immerse sections in Gomori trichrome stain for 10 minutes.
- 5. Differentiate using 0.2% acetic acid. A few dips should be sufficient.
- 6. Immerse rack with sections directly into 95 % alcohol
- 7. Continue to dehydrate in ascending alcohol solutions ($95\% \times 2$, $100\% \times 2$).
- 8. Clear with xylene $(5 \text{ min} \times 2)$.
- 9. Mount coverslip onto the slide with Permount or some other suitable organic mounting medium.

Results

- 1. Nuclei: dark blue
- 2. Muscle myofibrils: green-blue
- 3. Mitochondria and endoplasmic reticulum stain: red
- 4. Connective tissue stains: pale green-blue
- 5. Myelin stains: purple red
- 6. Type 1 fibers stain darker blue/green as compared to type 2 fibers.

Precautions

Handle with care. Avoid contact with eyes, skin and clothing. Do not ingest. Wear gloves