

VitroView™ Toluidine Blue Stain Kit

Cat. No. VB-3013

Introduction

Mast cells are found in connective tissue, and their cytoplasm contains granules (metachromatic) composed of heparin and histamine. This kit is designed for staining of formalin fixed, paraffin embedded tissue sections. Mast cells will stain dark blue/red purple (metachromatic staining), while the background will stain light blue (orthochromatic staining).

Kit Components

1. Toluidine blue stock solution ----- 25 ml
2. Sodium Chloride Solution ----- 225 ml

Storage

Room temperature.

Protocol

1. Deparaffinize and hydrate sections in distilled water.
2. Prepare Toluidine Blue Working Solution: Toluidine blue stock solution and sodium chloride solution are mixed well in a 1:9 ratio. The pH should be around 2.3 and less than 2.5. Prepare this solution fresh and discard after use.
3. Stain sections in toluidine blue working solution for 2-3 minutes.
4. Wash in distilled water, 3 changes.
5. Dehydrate with 2 changes of 95% Ethanol and 2 changes of 100% Ethanol (2 minute per change).
6. Clear with 3 changes of xylene (5 minute per change).
7. Mount coverslip onto glass slide with Permount or some other suitable organic mounting medium.

Results

- Mast cells ----- violet/red purple.
- Background ----- blue.

Precautions

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