

VitroView™ Oil Red O Stain Kit

Cat. No. VB-3007

Introduction

Oil Red O is a lysochrome diazo dye used for detecting neutral triglycerides and lipids in tissue. It is performed on fresh frozen tissue sections or cultured cells. The alcohol and xylene used in the procedure dissolve lipids in the tissue.

Kit Components

1. Oil Red O Solution - 100 ml
2. Pre-Stain Solution - 100 ml
3. Differentiation Solution - 100 ml
4. Mayer's Hematoxylin Solution - 100 ml

Storage

Room temperature.

Protocol

1. Cut frozen sections to 8 to 10 μ m. Air dry the sections to the slides
2. Fix in 10% buffered formalin for 20 mins at room temperature, briefly wash with running tap water for 3 mins.
3. Place in Pre-Stain Solution for 2 mins
4. Stain in pre-warmed Oil Red O solution for 8-10 minutes in 60 °C oven
5. Differentiate in Differentiation Solution for 2-5 minutes.
6. Lightly stain nuclei with Mayer's Hematoxylin Solution for 5 dips
7. Rinse with tap water for 3 mins
8. Mount in aqueous mountant

Technical Points

1. Include a positive control
2. Cryostat sections 8 to 10 microns for formalin fixed smears. Formalin fixation gives good results.
3. Step 8 - Obviously, the section must not be taken through clearing solvents prior to mounting, as this will remove the lipid to be detected.

Results

- Lipid..... red
- Nuclei..... blue

Precautions

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