Oil Red O Stain Kit (For Fat)

Description:
Oil Red O Stain Kit (For Fat) is intended for use in the histological visualization of fat cells and neutral fat. This kit may be used **ONLY** on frozen tissue sections, fresh smears, or touch preps as xylenes and alcohols will dissolve fat deposits. Staining may be done using a microwave or at room temperature.

Fat Cells: Red
Neutral Fat: Red
Nuclei: Blue

Uses/Limitations:
Not to be taken internally.
For In-Vitro Diagnostic use only.
Histological applications.
Do not use past expiration date.
Use caution when handling reagents.
Non-Sterile

Control Tissue:
Any frozen section containing fat.

Availability/Contents:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Kit Contents</th>
<th>Volume</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRG060</td>
<td>Propylene Glycol</td>
<td>60 ml x 2</td>
<td>18-25°C</td>
</tr>
<tr>
<td>ORG030</td>
<td>Oil Red O Solution</td>
<td>30 ml</td>
<td>18-25°C</td>
</tr>
<tr>
<td>HMM030</td>
<td>Hematoxylin, Mayer’s (Lillie’s Mod.)</td>
<td>30 ml</td>
<td>18-25°C</td>
</tr>
<tr>
<td>N/A</td>
<td>Graduated Mixing Vial</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Precautions:
Keep away from open flame.
Avoid contact with skin and eyes.
Harmful if swallowed.
Follow all Federal, State, and local regulations regarding disposal.
Use in chemical fume hood whenever possible.

Procedure (Microwave):

**NOTE:** Heat Oil Red O Solution to 60°C prior to beginning.

1. Prepare fresh or frozen tissue section as usual.
2. Apply 5-8 drops of Propylene Glycol and incubate for 5 minutes at room temperature.
3. Fill a coplin jar approximately 80% full with DI water.
4. Place coplin jar in microwave and heat until hot but not boiling.
5. Blot excess Propylene Glycol from slide.
6. Carefully place slide **across** the top of the coplin jar and apply 5-8 drops of Oil Red O Solution and heat in microwave for 10 seconds. Leave jar with slide in the microwave during the incubation period to better maintain temperature.
7. Incubate slide in heated Oil Red O Solution for 6-10 minutes.

**Note:** Prepare mixture of 85% Propylene Glycol in distilled water in graduated mixing vial.
8. Differentiate tissue section in 85% Propylene Glycol for 1 minute.
9. Rinse slide in 2 changes of distilled water.
10. Stain tissue section with 5-8 drops of Hematoxylin, Mayer’s (Lillie’s Modification) for 1-2 minutes.
11. Rinse slide thoroughly in tap water.
12. Rinse slide in 2 changes of distilled water.
13. Coverslip using an aqueous mounting medium (cat# AML060).

Procedure (Room Temperature):

1. Prepare fresh or frozen tissue section as usual.
2. Apply 5-8 drops of Propylene Glycol and incubate for 5 minutes at room temperature.
3. Fill a coplin jar approximately 80% full with DI water.
4. Place coplin jar in microwave and heat until hot but not boiling.
5. Blot excess Propylene Glycol from slide.
6. Incubate slide in 6-10 drops of Oil Red O Solution overnight at room temperature in a humidity chamber.

Note: Prepare mixture of 85% Propylene Glycol in distilled water in graduated mixing vial.

7. Differentiate tissue section in 85% Propylene Glycol for 1 minute.
8. Rinse slide in 2 changes of distilled water.
9. Stain tissue section with 5-8 drops of Hematoxylin, Mayer’s (Lillie’s Modification) for 1-2 minutes.
10. Rinse slide thoroughly in tap water.
11. Rinse slide in 2 changes of distilled water.
12. Coverslip using an aqueous mounting medium (cat# AML060).

References: