Thermo Scientific Rapid-Chrome Frozen Section Staining Kit Instructions for Use

This special staining kit simplifies the routine staining of frozen tissue sections from a cryostat. With the Thermo Scientific™ Rapid-Chrome™ Staining Kit, all the reagents for permanently stained frozen sections are supplied in one convenient carrying tray. The die-cut slots in the tray base accommodate each jar lid to reduce the problem of cross-contamination of reagents. In addition, the reagents are sequentially aligned so that the technician can dip the microscope slide progressively from jar to jar.

This kit can stain approximately 100 slides, although the actual number may vary due to the type and thickness of the specimen.

Warnings and Precautions

For in vitro diagnostic use.

Warning: Contains flammable reagents.

See Material Safety Data Sheets for warnings and precautions, as well as R & S code definitions. The following symbols are used on the product labels and packaging:

- Flammable
- Harmful
- Irritant
- Poison
- Pollutant
- Corrosive
- Harmful or fatal if swallowed.
- Strong sensitizer
- Poison
- Flammable
- Harmful or fatal if inhaled.
- Harmful or fatal if splashed into eyes.
- Harmful or fatal if contact with skin.
- Corrosive
- Poison
- Flammable
- Harmful or fatal if inhaled.
- Harmful or fatal if splashed into eyes.
- Harmful or fatal if contact with skin.
- Pollutant
- Poison
- Flammable
- Harmful or fatal if splashed into eyes.
- Harmful or fatal if contact with skin.
- Corrosive
- Harmful or fatal if splashed into eyes.
- Harmful or fatal if contact with skin.

Note: This kit contains Reagent Alcohol (100% and 95%) and Xylene, which are considered general laboratory reagents.

Storage Instructions

Keep away from direct sunlight. Store at room temperature. Do not handle or store near heat, sparks, flames or strong oxidants.

Lot number and expiration date are printed on the tray, not on the individual components.

Instructions for Use

A. Kit Preparation

1. All solutions required are provided in the tray and are ready to use full strength.

2. Less intense cryoplastic staining is desired, Eosin-Y can be diluted with 80 – 85% alcohol (ethanol, reagent, or methanol).

3. Bluing Reagent should be changed as often as necessary to retain its alkalinity.

4. Other solutions requiring periodic replacement are:
   - Distilled Water – frequently
   - Alcohols – as needed (ethanol or reagent)
   - Xylene – as needed

B. Specimen Preparation

1. To minimize the formation of artifacts and distortion due to air-drying and autolysis, freeze tissue as quickly as possible.

2. Adhere the tissue to the specimen holder (“microtome chuck”) using Thermo Scientific Shandon Cryomatrix™. The use of Cryomatrix increases the embedding mass and tends to reduce any distortions occurring during cutting and handling.

3. Cut and mount the frozen section in the usual manner.

4. Place slide in Thermo Scientific Rapid-Fixx™ immediately.

C. Staining Procedure

1. Remove all lids and place each in its slot to the right of the jar.

2. Place slides in Rapid-Fixx without delay.

3. Process slides through solutions following the directions indicated by the arrows.

4. A suggested staining protocol can be found below. Staining times may be adjusted to suit individual preferences in stain intensity.

5. Cover slips the slide with Thermo Scientific Shandon Mounting Medium.

6. Replace distilled waters, alcohols, xylene and Bluing Reagent if necessary.

7. Replace all lids on their original jars to prevent possible contamination.

Frozen Section Staining Protocol

<table>
<thead>
<tr>
<th>Step</th>
<th>Solution</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rapid-Fixx</td>
<td>5 – 7 seconds</td>
</tr>
<tr>
<td>2</td>
<td>Distilled Water</td>
<td>5 – 10 dips</td>
</tr>
<tr>
<td>3</td>
<td>Hematoxylin</td>
<td>1 minute</td>
</tr>
<tr>
<td>4</td>
<td>Distilled Water</td>
<td>5 – 10 dips</td>
</tr>
<tr>
<td>5</td>
<td>Bluing Reagent</td>
<td>3 dips</td>
</tr>
<tr>
<td>6</td>
<td>95% Alcohol</td>
<td>5 – 7 dips</td>
</tr>
<tr>
<td>7</td>
<td>Eosin-Y</td>
<td>15 seconds</td>
</tr>
<tr>
<td>8</td>
<td>95% Alcohol</td>
<td>5 – 7 dips</td>
</tr>
<tr>
<td>9</td>
<td>100% Alcohol</td>
<td>5 – 7 dips</td>
</tr>
<tr>
<td>10</td>
<td>100% Alcohol</td>
<td>5 – 7 dips</td>
</tr>
<tr>
<td>11</td>
<td>Xylene</td>
<td>5 – 7 dips</td>
</tr>
<tr>
<td>12</td>
<td>Xylene</td>
<td>5 – 7 dips</td>
</tr>
</tbody>
</table>

Note: Refer to manual

Active Ingredients

- **100% Alcohol**: Danger: Poison. Vapor harmful. May be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Flammable.

- **95% Alcohol**: Danger: Poison. Vapor harmful. May be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Flammable.


- **Gill 3 Hematoxylin**: Warning: harmful or fatal if swallowed.

- **Bluing Reagent**: Danger: Poison. Vapor harmful. May be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Flammable.

- **Eosin-Y**: Danger: Poison. Vapor harmful. May be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Flammable.

- **Xylene**: Danger: Harmful or fatal if swallowed. If swallowed, do not induce vomiting. Call a physician immediately. Vapor harmful. Flammable.

- **Shandon Mounting Medium**: Danger: Harmful or fatal if swallowed. If swallowed, do not induce vomiting. Call a physician immediately. Vapor harmful. Flammable.

Order Information

<table>
<thead>
<tr>
<th>Product</th>
<th>Unit</th>
<th>REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid-Chrome Frozen Section Staining Kit</td>
<td>100 slide capacity</td>
<td>9990001</td>
</tr>
<tr>
<td>Rapid-Fixx Fixative</td>
<td>2 x 1 Liter</td>
<td>6764212</td>
</tr>
<tr>
<td>Shandon Cryomatrix Frozen Embedding Medium bottles</td>
<td>Case of 4 squeeze (120 ml)</td>
<td>6769006</td>
</tr>
</tbody>
</table>

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