Oil Red O Stain, Propylene Glycol - Technical Memo

**APPLICATION:**

Newcomer Supply Oil Red O Stain, Propylene Glycol procedure is classified as a physical staining method and is used for identification of fat/lipid in frozen sections.

**METHOD:**

**Fixation:** Fresh tissue or formalin fixed unprocessed tissue
   a. *See Procedure Note #1*

**Technique:** Frozen sections cut at 8-10 microns mounted on adhesive slides

**Solutions:** All solutions are manufactured by Newcomer Supply, Inc.

All Newcomer Supply stain procedures are designed to be used with Coplin jars filled to 40 ml following the staining procedure provided below.

**STAINING PROCEDURE:**

1. Fix frozen section slides in Formalin 10%, Phosphate Buffered (1090) for 1 minute.
   a. *See Procedure Note #2*

2. Rinse sections carefully in two changes of distilled water.

3. Blot off excess water and place slides in Propylene Glycol 100%, ACS (13391) for 2-5 minutes.

4. Place slides directly into Oil Red O Stain, Propylene Glycol for 1 hour. Agitate occasionally or place Coplin jar on rotator/shaker with continuous gentle agitation.
   a. *See Procedure Notes #3 and #4*

5. Differentiate in Propylene Glycol 85%, Aqueous (133912) with agitation for a minimum of 3 minutes.

6. Rinse gently in two changes of distilled water.

7. Counterstain with Hematoxylin Stain, Mayer Modified (1202) for 2-3 minutes, depending on preference of nuclear stain intensity.

8. Wash gently in several changes of tap water.

9. Blue slides in Lithium Carbonate, Saturated Aqueous (12215) or Scott Tap Water Substitute (1380) for 10 dips.
   a. *See Procedure Note #5*

10. Wash gently in several changes of tap water.

11. Blot excess water from slide; coverslip with Mount-Quick Aqueous (6271A) mounting medium.
    a. *See Procedure Note #6*

**RESULTS:**

| Fat | Bright red |
| Nuclei | Blue to dark blue |

**SUPPORT/WARRANTY:** For assistance regarding this product contact Newcomer Supply at 800-383-7799 or newly@newcomersupply.com. The information presented in this technical memo is to the best of our knowledge accurate. No warranty is expressed or implied. The user is responsible for determining the suitability of this product for their use and upon receipt assumes all liability for its use and responsibility for compliance with any laws or regulations. Please refer to www.newcomersupply.com for complete warranty information. © Newcomer Supply, Inc., September 2014