

Instructions For Use ORG-IFU

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Oil Red O Solution (For Fat)

Description and Principle

Oil Red O Solution is a component of the Oil Red O Stain Kit (For Fat) (Catalog# ORK-1) 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.

Expected Results

Fat Cells:	Red
Neutral Fat:	Red
Nuclei:	Blue

Kit Contents	Storage
Additional Kit Reagents Sold Separately	
1. Propylene Glycol	18-25°C
2. Oil Red O Solution	18-25°C
3. Hematoxylin, Mayer's (Lillie's Mod.)	18-25°C

<u>Suggested Controls (not provided)</u> Any frozen section containing fat.

Uses/Limitations

For In-Vitro Diagnostic use only. Do not use if reagents become cloudy or precipitate Do not use past expiration date. Use caution when handling reagents. Non-Sterile Intended for FFPE sections cut at 5-10µm. This procedure has not been optimized for frozen sections. Frozen sections may require protocol modification.

Storage

Store at room temperature (18-25°C).

Safety and Precautions

Please see current Safety Data Sheets (SDS) for this product and components GHS classification, pictograms, and full hazard/precautionary statements.

Required but not included:

PRG500	Propylene Glycol	18-25°C
HMM125	Hematoxylin, Mayer's (Lilie's Modification)	18-25°C

Procedure (Standard):

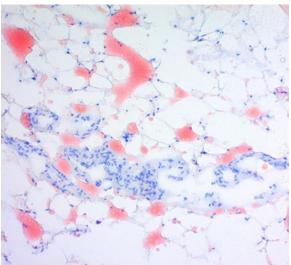
Note: Heat Oil Red O Solution to 60°C prior to beginning.

- 1. Prepare fresh or frozen tissue section as usual.
- 2. Place slide in room temperature Propylene Glycol for 5 minutes.

3. Incubate slide in heated (60°C) Oil Red O Solution for 6-10 minutes or overnight at room temperature.

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

- 4. Differentiate tissue section in 85% Propylene Glycol for 1 minute.
- 5. Rinse slide in 2 changes of distilled water.



Fat deposits in frozen Human Adipose tissue demonstrated with Oil Red O Stain Kit

6. Stain tissue section with Hematoxylin, Mayer's (Lillie's Modification) for 1-2 minutes.

- 7. Rinse slide thoroughly in tap water
- 8. Rinse slide in 2 changes of distilled water.
- 9. Coverslip using an aqueous mounting medium (cat# AML060).

Procedure (Dropper):

Note: Heat Oil Red O Solution to 60° prior to beginning.

Note: This microwave procedure is meant to stain one slide at a time using steam from a warmed staining jar to heat and keep the slide hydrated during staining.

- 1. Prepare fresh or frozen tissue section as usual.
- 2. Apply 5-8 drops of room temperature Propylene Glycol for 5 minutes.

3. Fill a staining jar approximately 80% full with DI water. Place staining jar in microwave and heat until hot but not boiling.

4. Blot excess Propylene Glycol from slide.

5. Carefully place slide across the top of the un-capped staining 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 for 6-10 minutes for staining. Note: Prepare mixture of 85% Propylene Glycol in distilled water in graduated mixing vial.

6. Differentiate tissue section in 85% Propylene Glycol for 1 minute.

7. Rinse slide in 2 changes of distilled water.

8. Stain tissue section with 5-8 drops of Hematoxylin, Mayer's (Lillie's Modification) for 1-2 minutes.

9. Rinse slide thoroughly in tap water.

10. Rinse slide in 2 changes of distilled water.

11. Coverslip using an aqueous mounting medium (cat# AML060)

References
1. Sheehan, DC., Hrapchak, BB. Theory and Practice of Histotechnology; 1980, page
225.



