

# Instructions For Use ORK-IFU

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## Oil Red O Stain Kit (For Fat)

### **Description and Principle**

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.

Fat staining occurs by absorption of oil red O into lipoid substances. This is a physical method of staining that relies on greater solubility of oil red O in the lipoid substance than in the dye solvent.

Storage

#### **Expected Results**

Fat Cells:	Red
Neutral Fat:	Red
Nuclei:	Blue

### Kit Contents

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**

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

#### Storage

Store kit and all components 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.

### 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.

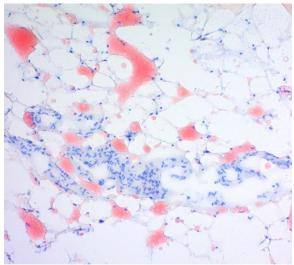
3. Incubate slide in heated (60°C) Oil Red O Solution for 6-10 minutes or overnight at room temperature.

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.

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

7. Rinse slide thoroughly in tap water



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

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 <u>across</u> 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

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