

# **Oil Red O Stain Kit**

# IN VITRO DIAGNOSTIC DATASHEET

This kit is used to demonstrate hydrophobic lipids, especially neutral fats in tissue

INTENDED USE : IN VITRO DIAGNOSTIC USE

**DESCRIPTION :** Lipids that exist as fats, namely the oily hydrophobic lipids, have an affinity for the sudan dyes. Oil Red O is an intense red stain for lipids. In order to penetrate the fats the dye must be dissolved in organic solvents, the solvent must be sufficiently dilute (aqueous) to avoid extracting the lipids into the solution. The most widely used solvent is isopropyl alcohol (isopropanol/IPA). For general localisation of lipids, Oil Red O is followed by a nuclear stain. Also, the tissue once stained, can be shown by polarised light to demonstrate birefringement cholesterol.

## **SPECIMEN COLLECTION :**

A standard formaldehyde based fixative provides satisfactory results. Fresh paraffin sections are preferrable cut at 5 microns.

REAGENTS :	150 TEST
Saturated Oil Red O Stain in Isopropyl Alcohol	1x 50ml
Iso-Propyl Alcohol 60%	1x 50ml
Haemalum Mayer	1x 50ml
* Number of TEST calculated according to 330 microliter per slide.	
CATALOG NO :	PLKit14-150

MICROBIOLOGICAL STATE : This product is not sterile.

**PROCEDURE TIME :** Approximate 30 minute.

#### **Working Solution**

Add 4 parts distilled water to 6 parts Oil Red O Stain. Mix well and stand for 10 minutes. Filter before use. Use immediately after filtration.

## PROTOCOL :

- 1. Cut frozen sections at 10 micron onto polysine or positively charged slides, air dry
- the sections for 1 hour at room temperature.
- 2. Rinse slides in distilled water.
- 3. Rinse with 60% isopropyl alcohol to clear background.
- 4. Stain with freshly prepared Oil Red O working solution 15 mins.
- 5. Rinse briefly with 60% isopropyl alcohol. Carefully rinse in distilled water.
- 6. Lightly stain nuclei with alum haematoxylin for 10 seconds.
- 7. Rinse with distilled water and blue.
- 8. Mount in aqueous mountant.

#### **RESULTS** :

Unsaturated hydrophobic lipids:	Red
Phospholipids:	Pink
Nuclei:	Blue

STORAGE AND STABILITY : This product is stable for 36 months when stored in +15 /+25 C

TROUBLESHOOTING: Please contact Patolab Technical Support by e-mail ( patolab@patolab.com.tr ).

