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## DATASHEET

### Oil Red O Stain Kit for Lipid Staining

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#### Product overview

<b>Name</b>	Oil Red O Stain Kit for Lipid Staining
<b>Cat No</b>	HB6183
<b>Alternative names</b>	ORO Staining kit
<b>Biological description</b>	<b><u>Overview</u></b>

The Oil Red O dye is a fat-soluble diazo dye which strongly stains lipids. This kit can be used for the histological visualization of fats or lipids in cells and tissues.

#### **Components**

- Oil Red O Solution 1 x 125 mL
- Propylene Glycol 1 x 500 mL
- Modified Mayer's Hematoxylin Solution 1 x 125 mL

The following components are required to perform this assay but are not included in the kit:

- Aqueous Mounting Medium

#### **Uses and applications**

This kit is suitable for use on frozen tissue sections, fresh smears or touch preps. It is not suitable for use with formaldehyde-fixed paraffin embedded sections due to the alcohols removing most lipids.

**Control Tissue:** Any frozen section containing fat may be used as a control tissue.

#### **Protocol summary:**

- Prepare fresh or frozen tissue sections
- Incubate slide in propylene glycol for 2 minutes
- Incubate slide in Oil Red O Solution for 6 minutes
- Prepare a mixture of 85% propylene glycol in distilled water
- Differentiate the tissue section in the 85% propylene glycol mixture for 1 minute
- Rinse slide in 2 changes of distilled water
- Incubate slide in Modified Mayer's Hematoxylin for 1-2 minutes
- Rinse slide thoroughly in tap water
- Rinse slide in 2 changes of distilled water
- Mount with an aqueous mounting media

Please see our protocol booklet: [Oil Red O Staining Kit Protocol](#)

#### **Interpretation of staining / results:**

- Fat cells – RED
- Neutral Fat – RED
- Nuclei - BLUE

<b>Biological action</b>	Dyes & stains
<b>Description</b>	Kit for histological lipid/fat staining

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#### Solubility & Handling

**Storage instructions**  
**Important**

Room temperature

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

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## References

### Quantitative Assessment of Adipocyte Differentiation in Cell Culture

Kraus et al (2016) Adipocyte 5(4)

**PubMedID** [27994948](#)

### Imaging of Neutral Lipids by Oil Red O for Analyzing the Metabolic Status in Health and Disease

Mehlem et al (2013) Nat Protoc 8(6)

**PubMedID** [23702831](#)

### Oil red-O Stains Non-Adipogenic Cells: A Precautionary Note

Kinkel et al (2004) Cytotechnology 46(1)

**PubMedID** [19003258](#)

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