

**Oil Red O Staining Kit**

(ORed)

Catalog #0843

**Product Description**

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Oil Red O is a fat-soluble diazo dye used for staining lipid and fat deposits in cells and tissues. While samples may be fresh, frozen or formalin fixed, Oil Red O is not compatible with paraffin embedded tissue sections. It is normal to observe Oil Red O precipitates. Therefore, a working solution must be prepared fresh through filtration using Whatman paper or a syringe-driven filter unit.

**Kit Components**

Cat. #	Component Name	Quantity	Storage
0843a	Oil Red O Stock	100 ml	Room Temperature
0843b	Fixative	100 ml	Room Temperature

**Materials Supplied by User**

Whatman Paper

Funnel

Deionized H<sub>2</sub>O (diH<sub>2</sub>O)

Phosphate Buffered Saline (PBS) - Cat. No. 0303

0.2µM syringe-driven filter unit (Millipore) – optional

**Product use**

ORed is for research use only. It is not approved for human or animal use, or for application in *in vitro* diagnostic procedures.

**Shipping**

Room temperature.

**Procedures**

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**A. Preparation of Working Solution**

1. Dilute Oil Red O Stock solution 3:2 using deionized H<sub>2</sub>O to make Oil Red O working solution.

Example: 3mL Oil Red O stock + 2mL deionized H<sub>2</sub>O

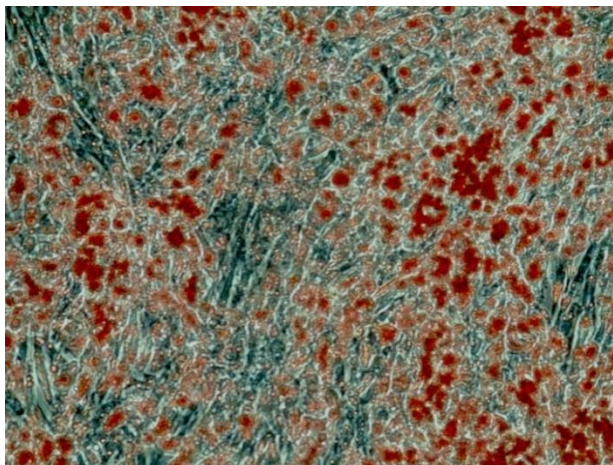
2. Place a piece of Whatman paper inside the funnel and filter the Oil Red O working solution. Alternatively, a syringe filter unit can be used in place of a Whatman paper/funnel system to filter the Oil Red O working solution.
3. The working solution must be used within 24 hours post filtration.

**B. Cell or Tissue Fixation**

1. Wash cells or tissue sections once in PBS.
2. Fix cells or tissue sections using the provided fixative solution at room temperature for 15

minutes. Fixation time should be empirically determined for individual user samples.

3. Remove fixative and wash sample 3X with diH<sub>2</sub>O.
4. Remove diH<sub>2</sub>O and pipette Oil Red O working solution. Volume varies depending on sample vessel. Enough solution should be used to completely cover the sample.
5. Incubate for 15 minutes at room temperature.
6. Remove Oil Red O working solution and wash 5X with diH<sub>2</sub>O.
7. Samples are now ready for imaging under microscope and should appear red (Figure 1).



**Figure 1:** ScienCell™ Oil Red O kit was used to stain for the presence of lipids.

*Caution: If handled improperly, some components of this product may present a health hazard. Take appropriate precautions when handling this product, including the wearing of protective clothing and eyewear. Dispose of properly.*