

## Oil-Red-O

### Cell Culture Tested

**Product Code: TC256**

#### Product Description :

Molecular weight: 408.49

Molecular formula: C<sub>26</sub>H<sub>24</sub>N<sub>4</sub>O

CAS No.: 1320-06-5

Synonym: 1-([4-(Xylylazo)xylyl]azo)-2-naphthol, 1-[2,5-Dimethyl-4-(2,5-dimethylphenylazo)phenylazo]-2-naphthol, Solvent Red 27

Oil-red-O is a lipid soluble lysochrome (fat stain) that has greater solubility in lipoid substances than in usual hydroalcoholic dye solvents. It is used to stain lipids, fatty acids, triglycerides and cholesterol in frozen tissue samples, histological sections and monolayer adipocyte cultures. It has very high depth of red colour and yet leaves the cellular structures clear.

Stained cells and sections can be visualized with transmitted light and has fluorescence properties when excited by far-red light.

In cell culture applications, Oil red O is most commonly used for visualization and quantification of adipogenic differentiation of mesenchymal stem cells *in vitro*. Oil droplets in mature adipocytes take up the dye and appear red in colour.

#### Quality Control:

##### Appearance

Reddish dark brown to black coloured powder.

##### Solubility

Clear dark red solution at 1mg in 1ml of 1:1 ethanol:chloroform solution.

Clear dark red solution at 1mg in 1ml of 100% ethanol or 100% Isopropanol with few insoluble particles.

##### Absorption maximum

~518nm

##### Dye content

NLT 75.0%

##### Cell Culture Test

Passes

#### Storage and Shelf Life:

Store at 10°C-30°C.

Shelf life is 48 months.

Refer expiry date given on the product label.

Revision : 1 / 2013

#### Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ Publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.