

Oil Red O Stain – Bob Schoonhoven, University of North Carolina

Oil Red O Stain for Glycol Methacrylate Sections

Staining Procedures For Plastic Embedded Tissue

Bob Schoonhoven, Laboratory of Molecular Carcinogenesis and Mutagenesis, Dept. of Environmental Sciences and Engineering, University of North Carolina, CB#7400, Chapel Hill, NC 27599

INDICATIONS:

Demonstrate lipids

SOLUTIONS:

60% aqueous triethyl phosphate

0.5% Oil Red O solution 0.5g Oil Red O (CI 26125

100.0ml 60% aqueous triethyl phosphate

Filter before use

Celestin Blue

0.5g celestin blue B

100 ml 5% aqueous ferric ammonium sulfate

Boil gently 2-3 minutes; cool to room temperature; filter; and add 12 ml glycerol Filter before use

PROCEDURE:

Rinse briefly in 60% triethyl phosphate
Stain 5-20 minutes in Oil Red O solution
Rinse 1-2 seconds in 60% triethyl phosphate
Rinse well in distilled water
Counterstain in Celestin Blue 15 minutes
Rinse well in distilled water
Mount in glycerin jelly or other water-soluble mount

Energy Beam Sciences
29B Kripes Road, East Granby, Connecticut 06026-9669
Phone: 800-992-9037 or 860-653-0411 Fax: 860-653-0422
E-mail: ebs@ebsciences.com

RESULTS:

lipids: red-orange nuclei: blue

CITATION:

Feldman, A.T. and Dapson, R.W., "Relative Effectiveness of Various Solvents for Oil Red O," Medical Laboratory Technology, Vol. 31:335-341, 1974.

Disclaimer:

Energy Beam Sciences manufactures the JB-4 and JB-4A microtomes for sectioning plastic-embedded tissue, and sells GMA kits. Hematoxylin and Eosin stain is a good general stain for many types of tissue.