REAGENT ASSEMBLY KIT
ITEM# k043

OIL RED O METHOD FOR FAT IN PROPYLENE GLYCOL

PURPOSE:	For In Vitro Diagnostic Use: Intended for the qualitative demonstration of fat
PRINCIPLE:	Since fat is soluble in alcohol and organic solvents, frozen sections must be used. Oil Red O is applied to the sections and Propylene Glycol is used to differentiate. Since Oil Red O has a higher affinity for lipids than Propylene Glycol, it is not removed from the lipid in the differentiation step.
CONTROL:	Tissue known positive for fat *Control Slides can be purchased from Histology Control Systems. See inside back cover, Item# cs017.*
SPECIMEN PREPARATION:	Formalin or Bouin's fixed, frozen sections cut at 8-10 micrometers
SOLUTIONS:	1. Propylene Glycol USP Item# s264 2. Oil Red O 0.5% in Propylene Glycol Item# s1848 3. Propylene Glycol 85% Solution Item# s264A 4. Harris Hematoxylin Item# s212 5. Acid Water 5% Solution Item# s108B 6. Glycerin Jelly Mounting Medium Item# s200 *Solutions can be purchased separately from Poly Scientific.*
NOTES:	Oil Red O in Propylene Glycol Item# s1848 must be filtered before use.
REFERENCE:	Luna, Lee G. Manual of Histologic Staining Methods of the Armed Forces Institute of Pathology. 3rd Ed. McGraw-Hill Book Co. New York. 1968. pp. 140-142.

STAINING PROCEDURE:

1. Place fixed and rinsed in distilled water cryostat sections in Propylene Glycol USP for 2 minutes.
2. Oil Red O Solution for 1-2 hours.
3. Differentiate in Propylene Glycol 85% Solution for 1 minute.
4. Rinse in distilled water, 2 changes.
5. Stain in Harris Hematoxylin Solution for 3 minutes.
6. Rinse in distilled water, 2 changes.
7. Differentiate in Acid Water 5% Solution if overstained.
8. Wash in water.
9. Neutralize in weak ammonia water if differentiated in Acid Water 5% Solution.
10. Wash in water, 2 changes.
11. Mount with Glycerin Jelly Mounting Medium.

RESULTS:

Fat ..... Red

Nuclei ..... Blue