

Materials List for:

An Alternative Approach for Sample Preparation with Low Cell Number for TEM Analysis

Sachin Kumar¹, Marie-Dominique Filippi¹

¹Division of Experimental Hematology and Cancer Biology, Cincinnati Children's Research Foundation

Correspondence to: Sachin Kumar at Sachin.kumar@cchmc.org, Marie-Dominique Filippi at Marie-Dominique.Filippi@cchmc.org

URL: <https://www.jove.com/video/54724>

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Materials

Name	Company	Catalog Number	Comments
Paraformaldehyde 20% Aqueous Soln	Electron microscopy Sciences	15713	CAUTION Toxic via inhalation, skin contact. Wear gloves, use fume hood.
Gluteraldehyde 70% Aqueous Soln	Electron microscopy Sciences	16350	CAUTION Toxic via inhalation, skin contact. Wear gloves, use fume hood.
Cacodylate buffer	Electron microscopy Sciences	12300	Make 0.1 M Cacodylate buffer (pH 7.4) in distilled water, store at 4 °C. CAUTION Irritant by inhalation or skin contact, wear gloves and work in fume hood.
Evans Blue	Sigma	E-2129	
Low melting agarose	Sigma Aldrich	A-5030	
Osmium tetroxide	Electron microscopy Sciences	19130	1 g in 50 ml of 0.1 M cacodylate buffer to make 2% OsO ₄ stock, CAUTION Very toxic by inhalation or skin contact, strong oxidizer, wear protective clothing, eye protection, use fume hood.
LX-112 Embedding Kits (LADD®)			
DDSA (Dodecenylsuccinic anhydride)	LADD	21340	Mix 16% DDSA; 30% NMA; 54% LX-112 together and then add 1.4% DMP-30
NMA (Nadic methyl anhydride)	LADD	21350	
Epoxy Resins Epon 812 (LX-112)	LADD	21310	CAUTION Toxic by inhalation, skin contact. Wear gloves, protective clothing, use fume hood.
DMP-30 (2,4,6-Tri(dimethylaminomethyl)phenol)	LADD	21370	
Reynolds lead citrate (EM Stain II)	Leica		CAUTION Toxic by inhalation, avoid contact with skin or eyes.
Uranyl acetate (EM Stain I)	Leica	8072820	CAUTION Toxic by inhalation, avoid contact with skin or eyes.
Iscove's Modified Dulbecco's Medium (IMDM)	ATCC	30-2005	composition: NaCl, NaHCO ₃ , HEPES, Glucose, Ca, Mg, sod pyruvate <i>etc.</i> For details https://www.atcc.org/~media/Attachments/E/9/7/E/4893.ashx
Pyramid tip mold	Ted Pella	10585	
mounting cylinders	Ted Pella	10580	
Ultra-microtome	(Leica EM UC7)		
200 mesh grids (nikil)	Electron microscopy Sciences	G-200 Ni	

Electron Microscope	Hitachi model H-7650		
Image capture engine software	AMT-600		
35 mm plastic Petri dishes	Fisher scientific		
Quick Bond Super glue Cyanoacrylate	Electron microscopy Sciences	72588	
Razor blades			
Glass scintillation vials	Fisher scientific	03-337-14	
Glass slides			
Eyelash tool			
Metal Loop tool			