

Materials List for:

Preparation of Primary Neurons for Visualizing Neurites in a Frozen-hydrated State Using Cryo-Electron Tomography

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Materials

Name	Company	Catalog Number	Comments
Dumont #7 Tweezers	Electron Microscopy Sciences	72803-01	For handling EM grids
Glass bottom dishes	MatTek Corp.	P35G-1.5-10C	For growing sample
Electron microscopy grids	Quantifoil	Holey Carbon, Au 200, R 2/2	For growing sample
Calcium-free filter paper	Whatman	1541-055	For blotting sample
Large flat point long tweezers	Excelta Corporation	E003-000590, 25-SA	For blotting sample
Vitrification device and tweezers	FEI	Vitrobot Mark III	For freezing sample
Minigrid storage boxes	Ted Pella, Inc.	160-40	For storing EM grids
Cryo transfer holder	Gatan	626 Single Tilt Liquid Nitrogen Cryo Transfer Holder	For imaging samples
Semiautomated tilt series acquisition software	SerialEM	http://bio3d.colorado.edu/SerialEM/	For imaging samples
Image processing software	IMOD eTomo	http://bio3d.colorado.edu/imod/	For image processing
Transmission electron microscope for cryoEM	JEOL, Tokyo	200-kV JEM2100 LaB ₆ electron microscope	For imaging samples
4k x 4k CCD camera	Gatan	N/A	For imaging samples
3-D annotation software	Visage Imaging GmbH	Amira/Avizo	For processing 3-D data
Software for digitally stitching 2-D images	Adobe	Adobe Photoshop	For processing 2-D data
DMEM, High Glucose	Invitrogen	11965-118	For hippocampal culture
Boric acid	Sigma Aldrich	B-0252	For hippocampal culture
Sodium tetraborate	Sigma Aldrich	B-9876	For hippocampal culture
Poly-L-lysine	Sigma Aldrich	P2636-500MG	For hippocampal culture
Filter system	Corning	430758	For hippocampal culture
Neurobasal medium	Invitrogen	21103-049	For DRG culture
B-27 supplement	Invitrogen	17504-044	For DRG culture
Penicillin/Streptomycin	Invitrogen	15140-122	For DRG culture
GlutaMAX	Invitrogen	35050-061	For DRG culture
Recombinant rat b-NGF	R&D Systems	556-NG	For DRG culture
Uridine	Sigma	U3003-5G	For DRG culture
5'-Fluoro-2'-deoxyuridine	Sigma	F0503-100MG	For DRG culture
Matrigel	BD Biosciences	356234	For DRG culture