

Materials List for:

Utilizing Combined Methodologies to Define the Role of Plasma Membrane Delivery During Axon Branching and Neuronal Morphogenesis

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Materials

Name	Company	Catalog Number	Comments
6-well tissue culture treated plates	Olympus Plastics	25-105	
glass coverslips	Fisher scientific	12-545-81	12CIR-1.5; must be nitric acid treated for 24 hours, rinsed in DI water 2x, and dried prior to use. Must be coated with 1 mg/ml Poly-d-lysine and rinsed prior to plating cells.
Amaya nucleofection solution	Lonza	VPG-1001	100 ml/transfection
Amaya Nucleofector/electroporator	Lonza		program O-005
35 mm Glass bottom live cell imaging dishes	Matek Corporation	p356-1.5-14-C	must be coated with 1 mg/ml Poly-d-lysine and rinsed prior to plating cells
Olympus IX81-ZDC2 inverted microscope	Olympus		
Lambda LS xenon lamp	Sutter Instruments Company		
Environmental Stage top incubator	Tokai Hit		
100x 1.49 NA TIRF objective	Olympus		
Andor iXon EM-CCD	Andor		
Odyssey Licor Infrared Imaging System	LI-COR	Odyssey CL-X	Used for scanning blots
Image studio software suite	LI-COR		Used for scanning on the Odyssey Infrared system; Image studio lite used for offline analysis of blots
Metamorph for Olympus	Molecular devices, LLC	version 7.7.6.0	Software used for all imaging and the analysis of DIC timelapse
CELL TIRF control software	Olympus		Software used to control lasers for TIRF imaging
Fiji (Image J)	NIH	ImageJ Version 1.49t	
60x Plan Aplanachromat 1.4 NA objective	Olympus		
40x 1.4 NA Plan Aplanachromat objective	Olympus		
Neurobasal media	GIBCO	21103-049	Base solution for both serum free and trypsin quenching media
Supplement B27	GIBCO	17504-044	500 ml/50 ml Serum free media and Trypsin Quenching media
L-Glutamine		35050-061	1 ml/50 ml Serum free media
Bovine serum albumin	Bio Basic Incorporated	9048-46-8	10% solution in 1x PBS for blocking coverslips; 5% solution in

			TBS-T for blocking nitrocellulose membranes.
10x trypsin	Sigma	59427C	
HEPES	CELLGRO	25-060-CI	
Dulbecco's Phosphate Buffered Saline (DPBS)+ Ca + Mg	Corning	21-030-cm	
Fetal bovine serum	Corning/CELLGRO	35-010-CV	
Hank's Balanced Salt Solution (HBSS)	Corning/CELLGRO	20-021-CV	
NaCl	Fisher scientific	BP358-10	
EGTA	Fisher scientific	CAS67-42-5	
MgCl ₂	Fisher scientific	BP214-500	
TRIS HCl	Sigma	T5941-500	
TRIS base	Fisher scientific	BP152-5	
N-Propyl Gallate	MP Biomedicals	102747	
Glycerol Photometric grade	Acros Organics	18469-5000	
Glycerol (non optics grade)	Fisher scientific	CAS56-81-5	
B-mercaptoethonal	Fisher scientific	BP176-100	
SDS	Fisher scientific	BP166-500	
Distilled Water	GIBCO	152340-147	
Poly-D-Lysine	Sigma	p-7886	Dissolved in sterile water at 1 mg/ml
Botulinum A toxin BoNTA	List Biological Laboratories	128-A	
Rabbit polyclonal anti human VAMP2	Cell signaling	11829	
Mouse monoclonal anti rat Syntaxin1A	Santa Cruz Biotechnology	sc-12736	
Goat polyclonal anti human SNAP-25	Santa Cruz Biotechnology	sc-7538	
Mouse monoclonal anti human β III-tubulin	Covance	MMS-435P	
Alexa Fluor 568 and Alexa Fluor 488 phalloidin, or Alexa Fluor 647	Invitrogen		
LI-COR IR-dye secondary antibodies	LI-COR	P/N 925-32212, P/N 925-68023, P/N 926-68022	800 donkey anti-mouse, 680 donkey anti rabbit, 680 donkey anti goat
0.2 μ m pore size nitrocellulose membrane	Biorad	9004-70-0	
Tween-20	Fisher scientific	BP337-500	
Methanol	Fisher scientific	S25426A	
Bromphenol Blue	Sigma	B5525-5G	
Sucrose	Fisher scientific	S6-212	
Paraformaldehyde	Fisher scientific	O-4042-500	
Triton-X100	Fisher scientific	BP151-500	
TEMED	Fisher scientific	BP150-20	
40% Bis-Acrylimide	Fisher scientific	BP1408-1	
Name	Company	Catalog Number	Comments
Alternative Validated Antibodies			
Mouse Monoclonal Anti-Syntaxin HPC-1 clone	Sigma Aldrich	S0664	

Mouse Monoclonal Synaptobrevin 2 (VAMP2)	Synaptic Systems	104-211	
Mouse Monoclonal SNAP25	Synaptic Systems	111-011	