

Materials List for:

A Microbiomechanical System for Studying Varicosity Formation and Recovery in Central Neuron Axons

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Materials

Name	Company	Catalog Number	Comments
12 mm coverslips	Warner Instruments	64-0702	for 24-well plate
25 mm coverslips	Fisher Scientific	12-545-102	for 6-well plate
Acetic acid	Fisher Scientific	A38-212	
Poly-D-lysine	Sigma	P6407	
Rat tail collagen	Roche	11 179 179 001	
10X PBS	National Diagnostics	CL-253	
Na ₂ SO ₄	Fisher Scientific	S373-500	
K ₂ SO ₄	Fisher Scientific	P304-500	
HEPES	Fisher Scientific	BP410-500	
D-glucose	Fisher Scientific	D16-500	
MgCl ₂	Fisher Scientific	BP214-500	
NaOH	Fisher Scientific	SS255-1	
Protease enzyme	Sigma	P4032	
FBS	Gibco	26140	
Sodium pyruvate	Gibco	11360-070	
L-glutamine	Gibco	25030081	
Penicillin/Streptomycin 100x (P/S)	Gibco	15140122	
MEM Earle's Salts	Gibco	11090	
B27 supplement	Gibco	17504-044	
Neurobasal	Gibco	21103-049	
Arabinosylcytosine (Ara-C)	Sigma	147-94-4	
Opti-MEM media	Gibco	31985-070	
Lipofectamine 2000	Invitrogen	1854313	transfection reagent
Borosilicate rods	World Precision Instruments Inc.	PG52151-4	for puffing pipette
rubber tubing	Fisher Scientific	14-169-1A	
10cc plastic syringe and plunger	Becton Dickinson		
micromanipulator	Sutter Instruments		
NaCl	Fisher Scientific	S640-3	
KCl	Fisher Scientific	BP366-500	
CaCl ₂	Fisher Scientific	C70-500	
Cell culture dish (35 mm x 10 mm)	Corning	3294	
Fluo-4 AM	Molecular Probes	F14201	for calcium imaging

Mito-YFP construct	Takara Bio Inc.		for cell transfection
YFP-N1 construct	Takara Bio Inc.		for cell transfection
Model P-1000 Flaming/Brown Micropipette puller	Sutter Instruments		
Eclipse TE2000-U Mcroscope	Nikon		
Plan Fluor ELWD 20x lens	Nikon	062933	objective
Apo TIRF 100x/1.49 oil lens	Nikon	MRD01991	objective