

Materials List for:

Rewiring Neuronal Circuits: A New Method for Fast Neurite Extension and Functional Neuronal Connection

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Materials

Name	Company	Catalog Number	Comments
Co-culture devices	Ananda Devices		Commercially available at http://www.anandadevices.com
Neuro devices	Ananda Devices		Commercially available at http://www.anandadevices.com
No. 1 Glass Coverslip 25 mm Round	Warner Instruments	64-0705	
35 mm Glass Bottom Dishes #0, Uncoated, Gamma-Irradiated	MatTex Incorporation	P35G-0-20-C	
35 mm cell culture dish, Non-Pyrogenic, Sterile	Corning Inc	430165	
95 mm x 15 mm Petri Dish, Slippable Lid, Sterile Polystyrene	Fisherbrand	FB0875714G	
50 mL Centrifuge tubes with printed graduations and flat caps	VWR	89039-656	
15 mL Polypropylene Conical Tube, 17 x 120 mm style, Non Pyrogenic, Sterile	Falcon	352097	
Neurobasal Medium	Life Technologies	21103-049	Extracellular solution
B-27 Supplement (50X), serum free	B-27 Supplement (50X), serum free	17504044	Extracellular solution
Penicillin, Streptomycin, Glutamine	Thermo Fisher Scientific	11995-065	Extracellular solution
200 µ L Pipettors	VWR	89079-458	
2 - 20 µL Pipettors	Aerosol Resistant Tips	2149P	
BD Falcon 3mL Transfer Pipettes [Non-sterile]	BD Falcon	357524	
Glucose	Gibco	15023-021	Extracellular solution
HEPES	Sigma	7365-45-9	Extracellular solution/Beads
NaCl	Sigma-Aldrich	7647-14-5	Extracellular solution
KCl	Sigma-Aldrich	7447-40-7	Extracellular solution
CaCl ₂	Sigma-Aldrich	10043-52-4	Extracellular solution
MgCl ₂	Sigma-Aldrich	7786-30-3	Extracellular solution
#5 Dumont Dumostar Tweezers 11 cm	World Precision Instruments	500233	
Dissection tools	Braun, Aesculap		
Poly-D-lysine Hydrobromide	Sigma-Aldrich	P6407	

Micro particles based on polystyrene, 10 µm	Sigma-Aldrich	72986	
Borosilicate tubes	King Precision Glass, Inc.	14696-2	
Horizontal Pipette Puller	Sutter Instruments	Brown-Flaming P-97	
Micromanipulators, PCS-5000 Series	SD Instruments	MC7600R	
1 mL Syringe	BD Luer-Lok	309628	
Inverted Microscope	Olympus	IX71	
Objective	Olympus	UIS2, LUCPLFLN 40X	
CCD Camera	Photometrics	Cascade II: 512	
Leibovitz's (1x) L-15 Medium	Life Technologies	11415-064	Rat Dissection
Typosin-EDTA (0.05%), Phenol red	Life Technologies	25300054	Rat Dissection
DMEM (1x) Dulbecco's Modified Eagle Medium [+4.5 g/L D-Glucose, + L-Glutamine, + 110 mg/L Sodium Pyruvate]	Life Technologies	11995-065	Rat Dissection
HBSS (1x) Hank's Balanced Salt Solution [- Calcium Chloride, - Magnesium Chloride, - Magnesium Sulfate]	Life Technologies	14170-112	Rat Dissection