

Materials List for:

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

Margaret H. Magdesian^{1,2,3}, Madeleine Anthonisen¹, G. Monserratt Lopez-Ayon¹, Xue Ying Chua¹, Matthew Rigby¹, Peter Grütter¹

¹Department of Physics, McGill University

²Department of Neurology and Neurosurgery, Montreal Neurological Institute

³Ananda Devices

Correspondence to: Peter Grütter at peter.grutter@mcgill.ca

URL: <https://www.jove.com/video/55697>

DOI: [doi:10.3791/55697](https://doi.org/10.3791/55697)

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 | |

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|--|----------------------------|--------------------|----------------|
| 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 |
| Tyrosin-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 |