

Materials List for:

Single Cell Durotaxis Assay for Assessing Mechanical Control of Cellular Movement and Related Signaling Events

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Materials

| Name | Company | Catalog Number | Comments |
|--|------------------------------|---------------------|---|
| Acrylamide 40 % | National Diagnostic | EC-810 | |
| Ammonium Persulfate | Fisher | BP179-25 | |
| BD20A High frequency generator | Electro Technic Products | 12011A | 115 V - Handheld Corona Wand |
| Bind Silane (γ-methacryloxypropyltrimethoxysilane) | Sigma Aldrich | M6514 | |
| Bis-acrylamide 2% | National Diagnostic | EC-820 | |
| Borosilicate glass capillaries | World Precision Instruments | 1B100-4 | |
| Branson 2510 Ultrasonic Cleaner | Branson | | 40 kHz frequency |
| Coarse Manipulator | Narshige | MC35A | |
| DMEM | Corning | 10-013-CV | |
| DMEM without phenol red | Sigma Aldrich | D5030 | |
| Dual-Stage Glass Micropipette Puller | Narshige | PC-10 | |
| Epidermal Growth Factor | Peptotech | AF-100-15 | |
| Ethanol | Pharmco-aaper | 111000200 | |
| Fetal Bovine Serum (Qualified One Shot) | Gibco | A31606-02 | |
| Fibronectin | EMD Millipore | FC010 | |
| Fluospheres Carboxylate 0.2 um | Invitrogen | F8810, F8807, F8811 | |
| Fugene 6 | Roche | 1815091 | 1.5 ug DNA / 6uL fugene 6 per 35mm dish |
| Glacial Acetic Acid | Fisher Chemical | A38SI-212 | |
| Glass Bottom Dish | CellVis | D60-60-1.5-N | |
| Glass Coverslip | Electron Microscopy Sciences | 72224-01 | 22 mm, #1.5 |
| HCl | JT Baker | 9535-03 | |
| Hellmanex III Special cleaning concentrate | Sigma Aldrich | Z805939 | Used at 2% in ddH2O for cleaning coverslips |
| HEPES powder | Sigma Aldrich | H3375 | Make 50mM HEPES buffer, pH 8.5 |
| Intelli-Ray 400 Shuttered UV Flood Light | Uvicon International | UV0338 | |
| Isopropanol | Fisher Chemical | A417-4 | |
| Microforge | Narshige | MF900 | |
| Micromanipulator | Narshige | MHW3 | |
| Mineral Oil | Sigma Aldrich | M5904 | |

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|---|----------------------------------|----------|--|
| Nanopure Life Science UV/UF System | Barnstead | D11931 | ddH2O |
| Nikon Eclipse Ti | Nikon | | |
| OptiMEM | Invitrogen | 31985062 | |
| Parafilm M | Bemis Company, Inc | PM-992 | |
| PBS | | | 139 mM NaCl, 2.5 mM KCl, 28.6 mM Na2HPO4, 1.6 mM KH2PO4, pH 7.4 |
| Platelet Derived Growth Factor-BB (PDGF-BB) | Sigma Aldrich | P4056 | |
| Ref52 | | | Rat embryonic fibroblast cell line; Culture in DMEM + 10% FBS |
| Ringer's Buffer | | | 134 mM NaCl, 5.4 mM KCl, 1 mM MgSO4, 2.4 mM CaCl2, 20 mM HEPES, 5 mM D-Glucose, pH 7.4 |
| SKOV-3 | American Type Culture Collection | | Culture in DMEM + 10% FBS |
| Sulfo-SANPAH | Covachem | 12414-1 | |
| Tabletop Plasma Cleaner | Harrick Plasma | PDC-32G | |
| TEMED | Sigma Aldrich | T9281-50 | |