

Co-culture of Glioblastoma Stem-like Cells on Patterned Neurons to Study Migration and Cellular Interactions

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Materials

| Name | Company | Catalog Number | Comments |
|--------------------------------------|-----------------------|----------------|---|
| (3-aminopropyl) triethoxysilane | Sigma | 440140-100ML | The amino group is useful for the bioconjugation of mPEG-SVA |
| 96-well round-bottom plate | Sarstedt | 2582624 | Used to prepare spheroids |
| Accutase | Gibco | A11105-01 | Stored at -20 °C (long-term) or 4 °C (short-term), sphere dissociation enzyme |
| B27 | Gibco | 12587 | Stored at -20 °C, defrost before use |
| Basic Fibroblast Growth Factor | Peprtech | 100-18B | Stored at -20 °C, defrost before use |
| Countess Cell Counting ChamberSlides | Invitrogen | C10283 | Used to cell counting |
| Coverslips | Marienfeld | 111580 | Cell culture substrate |
| Dessicator cartridges | Sigma | Z363456-6EA | Used to reduce moisture during (3-aminopropyl) triethoxysilane treatment |
| DPBS 10x | Pan Biotech | P04-53-500 | Stored at 4 °C |
| Fiji software, MTrack2 macro | ImageJ | | Used to analyze pictures |
| Flask 75 cm ² | Falcon | 10497302 | |
| HBSS | Sigma | H8264-500ML | |
| Heparin sodium | Sigma | H3149-100KU | Stored at 4 °C |
| Laminin | | 114956-81-9 | Promotes neuronal adhesion |
| Leonardo software | | | loading of envisioned micropatterns |
| MetaMorph Software | Molecular Devices LLC | NA | Microscopy automation software |
| Methylcellulose | Sigma | M0512 | Diluted in NBM for a 2% final concentration |
| Neurobasal medium | Gibco | 21103-049 | Stored at 4 °C |
| Nikon TiE (S Fluor, 20x/0.75 NA) | | | inverted microscope equipped with a motorized stage |
| Penicillin - Streptomycin | Gibco | 15140-122 | Stored at 4 °C |

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| PLPP | Alveole | PLPPclassic_1ml | Photoinitiator used to degrade the PEG brush |
| Poly(ethylene glycol)-Succinimidyl Valerate (mPEG-SVA) | Laysan Bio | VA-PEG-VA-5000-5g | Used as an anti-fouling coating |
| PRIMO | Alveole | PRIMO1 | Digital micromirror device (DMD)-based UV projection apparatus |
| Trypan blue 0.4% | ThermoFisher | T10282 | Used for cell counting |
| Trypsin-EDTA | Sigma | T4049-100ML | Used to detach adherent cells |