

Materials List for:

# Cell Sorting of Neural Stem and Progenitor Cells from the Adult Mouse Subventricular Zone and Live-imaging of their Cell Cycle Dynamics

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URL: <https://www.jove.com/video/53247>

DOI: [doi:10.3791/53247](https://doi.org/10.3791/53247)

## Materials

| Name  | Company               | Catalog Number | Comments                                       |
|---|-----------------------|----------------|--|
| 96-well uncoated glass bottom culture plates            | MatTek Corp.          | P96G-1.5-5-F   |  |
| μ-Plates 96-well  | Ibidi                 | 89626          |  |
| Poly-D-Lysine   | Millipore             | A003E          |  |
| NeuroCult NSC Basal Medium                              | STEMCELL Technologies | 5700           |  |
| NeuroCult NSC Proliferation Supplement                  | STEMCELL Technologies | 5701           |  |
| Heparin   | STEMCELL Technologies | 7980           |  |
| EGF   | Millipore             | GF144          |  |
| FGF-2   | Millipore             | GF003          |  |
| Papain  | Worthington           | LS003119       |  |
| EBSS  | Invitrogen            | 24010-043      |  |
| L-cysteine  | Sigma                 | C-7352         |  |
| 0.5M EDTA, pH 8.0                                       | Promega               | V4231          |  |
| DNase I   | Sigma                 | D5025-15KU     |  |
| Trypsin inhibitor type II                               | Sigma                 | T9128          | Ovomucoid                                      |
| DMEM:F12 medium   | Life Technologies     | 31330-038      |  |
| 20 μm filter  | BD Medimachine Filcon | 340622         |  |
| Eppendorf microtubes 3810X                              | Sigma                 | Z606340-1000EA |  |
| BSA   | Sigma                 | A1595          | Bovine serum albumin solution                  |
| CD24 phycoerythrin-cyanine7 conjugate [PC7]             | Life Technologies     | A14776         | Mouse IgM; clone MMA. 1:50                     |
| CD15/LeX fluorescein isothiocyanate [FITC] - conjugated | BD Biosciences        | 332778         | Rat IgG2b; clone M1/69. 1:50                   |
| Mouse anti-human LeX antibody                           | BD Pharmingen         | 559045         | Mouse IgM; clone MAM. 1:50                     |
| Alexa647 - conjugated EGF ligand                        | Life Technologies     | E35351         | 1:200; Ax647-conjugated EGF ligand in the text |
| CompBeads   | BD Biosciences        | 644204         |  |
| MACS LS separation columns                              | Miltenyi Biotec       | 130-042-401    | separation columns (in the manuscript)         |

|  |                                 |             |  |
|--|---------------------------------|-------------|--|
| Anti-mouse IgM microbeads  | Miltenyi Biotec                 | 130-047-301 |  |
| Hoechst 33258  | Sigma                           | 861405      | HO (in the manuscript)                                 |
| INFLUX cell sorter   | BD Biosciences                  |             | FACS sorter (in the text)                              |
| Nikon A1R confocal laser scanning microscope system attached to an inverted ECLIPSE Ti | Nikon Corp.                     |             | confocal laser scanning microscope (in the manuscript) |
| NIS-Elements AR.4.13.01 64-bit software  | Nikon Corp.                     |             | NIS-Elements software (in the manuscript)              |
| Plan Apo VC 20x DIC objective (NA: 0.75)   | Nikon Corp.                     |             |  |
| ECLIPSE Ti thermostated chamber  | Nikon Corp.                     |             | thermostated chamber (in the manuscript)               |
| ImageJ   | RBS                             |             |  |
| FlowJo   | Tree Star, Ashland, OR          |             |  |
| FUCCI mice   | RIKEN BioResource Center, JAPAN |             | Sakaue-Sawano et al. 2008                              |