

Materials List for:

# An Enzyme- and Serum-free Neural Stem Cell Culture Model for EMT Investigation Suited for Drug Discovery

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URL: <https://www.jove.com/video/54018>

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## Materials

| Name                                             | Company                         | Catalog Number | Comments                                                                                                  |
|--------------------------------------------------|---------------------------------|----------------|-----------------------------------------------------------------------------------------------------------|
| BMP4, rhBMP4                                     | RnD Systems                     | 314-BP-01M     |                                                                                                           |
| Bovine pancreas insulin                          | Sigma                           | I1882          |                                                                                                           |
| Boyden chamber, CytoSelect cell invasion assay   | Cell Biolabs                    | CBA-110        | 24 well plate system                                                                                      |
| Cell culture dish with grid                      | Ibidi 500 mm dish, 35 mm        | 80156          |                                                                                                           |
| CellMask Orange                                  | Life Technologies               | C10045         | Plasma membrane dye, use at 1:1,000.                                                                      |
| DAPI                                             | LifeTechnologies                | D1306          | Stock at 5 mg/ml. Use at 1:10,000. Cancerogenic. Appropriate protection (gloves, coat, goggles) required. |
| DMEM/F12 1:1 medium bottle                       | Gibco Invitrogen                | 21331-020      |                                                                                                           |
| FGF2, rhFGF2                                     | RnD Systems                     | 233-FB-01M     |                                                                                                           |
| Fibronectine, bovine                             | Sigma                           | F4759          |                                                                                                           |
| Glutamax supplement                              | Gibco Invitrogen                | 35050-061      |                                                                                                           |
| Graphics software with pixel measurement feature | Fiji                            | fiji.sc/Fiji   | version 2.0.0-rc-30/1.49s                                                                                 |
| HBSS media                                       | Sigma                           | H9394          |                                                                                                           |
| Human apo-Transferrin                            | Sigma                           | T1147          | Possible lung irritant. Avoid inhalation. Use appropriate protection.                                     |
| L-glutamine                                      | Gibco Invitrogen                | 25030-024      |                                                                                                           |
| Nestin, Mouse anti Nestin antibody               | Genetex                         | GTX26142       | Use at 1:100, 4% PFA fixation, Triton X100 at 0.1%                                                        |
| Olig2, Rabbit anti Olig2 antibody                | Provided by Hirohide Takebayash | Personal stock | Use at 1:2,000, 4% PFA fixation, Triton X100 at 0.1%                                                      |
| Penicillin/Streptomycin/Fungizone                | Gibco Invitrogen                | 15240-062      |                                                                                                           |
| Podoplanin, Mouse anti Podoplanin antibody       | Acris                           | DM3614P        | Use at 1:250, 4% PFA fixation, avoid Triton X100                                                          |
| Poly-L-ornithine                                 | Sigma                           | P3655          |                                                                                                           |
| Putrescine                                       | Sigma                           | P5780          | Skin and eye irritant. Appropriate protection required.                                                   |

|                                   |                    |           |                                                       |
|-----------------------------------|--------------------|-----------|-------------------------------------------------------|
| Sodium selenite                   | Sigma              | S5261     |                                                       |
| Sox10, Rabbit anti Sox10 antibody | Millipore Chemicon | AB5774    | Use at 1:200, 4% PFA fixation,<br>Triton X100 at 0.1% |
| TGFb1, rhTGFb1                    | RnD Systems        | 240-B-010 |                                                       |
| Uncoated Petri dishes             | Falcon Corning     | 351029    |                                                       |