

Magnetic Isolation of Microglial Cells from Neonate Mouse for Primary Cell Cultures

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jove.com/video/62964

Materials

| Name | Company | Catalog Number | Comments |
|--|---------------------|----------------|----------|
| Anti mouse ACSA-2 PE Vio 615 | Miltenyi Biotec | 130-116-246 | |
| Anti mouse CD11b BV421 | Sony Biotechnology | 1106255 | |
| Anti mouse CD45 BV510 | Sony Biotechnology | 1115690 | |
| Anti mouse CX3CR1 PE Cy7 | Sony Biotechnology | 1345075 | |
| Anti mouse NeuN PE | Milli-Mark | FCMAB317PE | |
| anti mouse O4 Vio Bright B515 | Miltenyi Biotec | 130-120-016 | |
| BD Cytotfix/Cytoperm permeabilization kit | BD Biosciences | 554655 | |
| Bovine Serum Albumin | Miltenyi Biotec | 130-091-376 | |
| CD11b (Microglia) MicroBeads, h, m | Miltenyi Biotec | 130-093-634 | |
| Confocal microscope | Leica TCS SP8 | | |
| D-PBS (10x) | Thermo Scientific | 14200067 | |
| EDTA | Sigma-Aldrich | E1644 | |
| Falcon Cell culture 12-well plate, flat bottom + lid | Dutscher | 353043 | |
| Falcon Cell culture 96-well plate, flat bottom + lid | Dutscher | 353072 | |
| Falcon tubes 50 mL | Dutscher | 352098 | |
| Fc blocking reagent (Mouse CD16/32) | BD Biosciences | 553142 | |
| Fluorescence microscope | Nikon ECLIPSE TE300 | | |
| gentleMACS C Tubes (4 x 25 tubes) | Miltenyi Biotec | 130-096-334 | |
| gentleMACS Octo Dissociator with Heaters | Miltenyi Biotec | 130-096-427 | |
| Hanks' Balanced Salt Solution (HBSS) +CaCl ₂ +MgCl ₂ 10x | Thermo Scientific | 14065049 | |

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| Hanks' Balanced Salt Solution (HBSS) -CaCl ₂ -MgCl ₂ 10x | Thermo Scientific | 14185045 | |
| iQ SYBR Green Supermix | Bio-rad | 1725006CUST | |
| Iscrip c-DNA synthesis | Bio-rad | 1708890 | |
| Latex beads, amine-modified polystyrene, fluorescent red | Sigma-Aldrich | L2776-1mL | |
| Lipopolysaccharides (LPS) from Escherichia coli O55:B5 | Sigma-Aldrich | L2880 | |
| Macrophage-SFM serum-free medium | Thermo Scientific | 12065074 | |
| MACS BSA Stock Solution | Miltenyi Biotec | 130-091-376 | |
| MACS SmartStrainers (70 µm), 4 x 25 pcs | Miltenyi Biotec | 130-110-916 | |
| Mouse IgG1 PE | Millipore | MABC002H | |
| Mouse IgG2a PE Cy7 | Sony Biotechnology | 2601265 | |
| Mouse IL1 beta | Miltenyi Biotec | 130-101-684 | |
| Multi-24 Column Blocks | Miltenyi Biotec | 130-095-691 | |
| MultiMACS Cell24 Separator | Miltenyi Biotec | | |
| Neural Tissue Dissociation Kit - Papain | Miltenyi Biotec | 130-092-628 | |
| Nucleocounter NC-200 | Chemometec | | |
| Nucleospin RNA Plus XS | Macherey Nagel | 740990.5 | |
| Nun EZFlip Top Conical Centrifuge Tubes | Thermo Scientific | 362694 | |
| OPTILUX Petri dish - 100 x 20 mm | Dutscher | 353003 | |
| Penicilline-streptomycine (10 000 U/ mL) | Thermo Scientific | 15140122 | |
| Rat IgG2b, k BV421 | BD Biosciences | 562603 | |
| Rat IgG2b, k BV510 | Sony Biotechnology | 2603230 | |
| REA control (S) PE vio 615 | Miltenyi Biotec | 130-104-616 | |
| REA control (S) Vio Bright B515 | Miltenyi Biotec | 130-113-445 | |
| Recombinant Mouse IFN-gamma Protein | R&D System | 485-MI | |
| Recombinant Mouse IL-10 Protein | R&D System | 417-ML | |
| Recombinant Mouse IL-4 Protein | R&D System | 404-ML | |
| RIPA Buffer | Sigma-Aldrich | R0278 | |
| Viability probe (FVS780) | BD Biosciences | 565388 | |