

Materials List for:

Analysis of Immune Cells in Single Sciatic Nerves and Dorsal Root Ganglion from a Single Mouse Using Flow Cytometry

Asa S. Hidmark¹, Peter P. Nawroth^{1,2,3}, Thomas Fleming^{1,3}

¹Department of Medicine I and Clinical Chemistry, University Hospital of Heidelberg

²Institute for Diabetes and Cancer IDC Helmholtz Center Munich, Germany & Joint Heidelberg-IDC Translational Diabetes Program

³German Center for Diabetes Research (DZD)

Correspondence to: Thomas Fleming at Thomas.Fleming@med.uni-heidelberg.de

URL: <https://www.jove.com/video/56538>

DOI: [doi:10.3791/56538](https://doi.org/10.3791/56538)

Materials

| Name | Company | Catalog Number | Comments |
|--|-----------------------------------|----------------|--|
| C57BL/6 Mouse | Charles River | C57BL/6NCrl | |
| DMEM (+1g/L glucose, Glutamine, Pyruvate) | Thermo | 31885023 | The source of this material is not important |
| HEPES | Sigma-Aldrich | H3375 | |
| Bovine serum albumin (BSA) | Sigma-Aldrich | A2153 | |
| Collagenase Type 4 | Worthington Biochemical Corp., US | LS004188 | |
| Deoxyribonuclease (DNase) I from bovine pancreas I | Sigma-Aldrich | DN25-1g | |
| Ethylenediaminetetraacetic acid (EDTA) | Sigma-Aldrich | E6758 | |
| Foetal Calf Serum (FCS), heat inactivated | Sigma-Aldrich | F4135 | |
| Antibody against CD11b-PerCP/Cy5.5 | Biolegend | 101228 | Clone M1/70 |
| Antibody against MHC class II, biotinylated | Biolegend | 107603 | Clone M5/114.15.2 |
| Antibody against CD45-A647 | Biolegend | 107603 | Clone 30-F11 |
| Antibody against CD68-APC | Biolegend | 137007 | Clone FA/11 |
| Antibody against CD206-PE | Biolegend | 141706 | Clone C068C2 |
| Antibody against F4/80-PE/Cy7 | Biolegend | 123113 | Clone BM8 |
| Streptavidin-PE/Cy7 | Biolegend | 405206 | Used to detect MHCII-biotin with CD45-A647 and CD11b-PerCP/Cy5.5 |
| Streptavidin-PerCP | Biolegend | 405213 | Used to detect MHCII-biotin with CD68-APC and F4/80-PE/Cy7 |
| Triton-X 100 | Sigma-Aldrich | T8787 | |
| DAPI | Sigma-Aldrich | D9542-1MG | Dilute in PBS to a 50x and store at 4 °C in the dark |
| Cell dissociation sieve - tissue grinder kit | Sigma-Aldrich | CD1 | |
| V-Shaped, 96-well plates | Greiner/Sigma | M8185 | |
| 5ml polystyrene round-bottom tube, 12x75mm | BD Biosciences | 352008 | |
| 60x15mm petri dish | Greiner/Sigma | Z643084 | |
| BD LSR II Flow Cytometer | BD Biosciences | | |