

Materials List for

Unique Approach for Isolating Rat Bone Marrow Neutrophils with Comparable Capacity

Xiangfeng Gong^{*1}, Yutao Sun^{*1}, Xiaoxin Zhang^{2,3}, Zhenghua Xiao^{1,4}, Li He^{1,4}, Chaoyi Qin^{1,4}

¹Department of Cardiovascular Surgery, West China Hospital, Sichuan University ²Department of Integrated Traditional Chinese and Western Medicine, Sichuan Provincial Pancreatitis Centre, West China Hospital, Sichuan University ³West China-Liverpool Biomedical Research Centre, West China Hospital, Sichuan University ⁴Cardiovascular Surgery Research Laboratory, West China Hospital, Sichuan University

*These authors contributed equally

Corresponding Authors

Li He
LeeHeCVS@outlook.com

Chaoyi Qin
qinchaoyi@wchscu.cn

Citation

Gong, X., Sun, Y., Zhang, X., Xiao, Z., He, L., Qin, C. Unique Approach for Isolating Rat Bone Marrow Neutrophils with Comparable Capacity. *J. Vis. Exp.* (206), e65506, doi:10.3791/65506 (2024).

Date Published

April 26, 2024

DOI

10.3791/65506

URL

jove.com/video/65506

Materials

| Name | Company | Catalog Number | Comments |
|--|-------------------|----------------|----------|
| A488-conjugated donkey antirabbit IgG(H + L) | Invitrogen, USA | A32790 | |
| A594-conjugated donkey anti-mouse IgG(H + L) | Invitrogen, USA | A32744 | |
| A594-conjugated goat anti-Mouse IgG1 | Invitrogen, USA | A21125 | |
| Anti-rat myeloperoxidase | Abcam, England | ab134132 | |
| Anti-rat neutrophil elastase | Abcam, England | ab21595 | |
| Celigo Image Cytometer | Nexelom, USA | 200-BFFL-5C | |
| DNase I | Sigma, USA | 10104159001 | |
| fetal bovine serum (FBS) | Gibco, USA | 10099141C | |
| Hank's Balanced Salt Solution (HBSS) | Gibco, USA | C14175500BT | |
| Hoechst | Thermofisher, USA | 33342 | |
| Isoflurane | RWD, China | R510-22-10 | |
| Mowiol | Sigma, USA | 81381 | |
| Normal Donkey Serum | Solarbio, China | SL050 | |
| Paraformaldehyde | biosharp, China | BL539A | |
| Penicillin-streptomycin | Hyclone, USA | SV30010 | |
| Percoll | GE, USA | P8370-1L | |
| Phorbol 12-myristate 13-acetate (PMA) | Sigma, USA | P1585 | |
| Picogreen dsDNA Assay Kit | Invitrogen, USA | P11496 | |
| Rat neutrophil isolation kit | Solarbio, China | P9200 | |
| Red blood cell lysis buffer | Solarbio, China | R1010 | |
| Roswell Park Memorial Institute (RPMI) media | Hyclone, USA | SH30809.01B | |

| | | | |
|---|-------------------|-----------|--|
| RWD Universal Animal Anesthesia Machine | RWD, China | R500 | |
| Sprague Dawley (SD) rats | Dashuo, China | | |
| SytoxGreen | ThermoFisher, USA | S7020 | |
| Tris-EDTA (TE) buffer | Solarbio, China | T1120 | |
| Triton-X-100 | Biofroxx, German | 1139ML100 | |