

Frequencies of Immune Cells in Rat Tissue

| Cell Type | Frequencies (% of total leukocytes) ^{1,2,3} | | | | STEMCELL Technologies Cell Isolation Kits (Catalog #) ⁴ | |
|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------|-------------|--------------|-----------------------------------------------------------------------|------------------------------|
| | Tissue Source | | | | Selection Method | |
| | Spleen | Lymph Nodes | Bone Marrow | Whole Blood | Negative ⁵ | Positive ⁶ |
| Lymphocytes FSC/SSC | 65.3 ± 10.6% | 91.1 ± 3.8% | 31.6 ± 4.6% | 85.1 ± 8.1% | — | — |
| Monocytes FSC/SSC | 18.4 ± 4.5% | 7.0 ± 3.1% | 16.4 ± 1.6% | 10.5 ± 7.5% | — | — |
| Granulocytes FSC/SSC | 5.9 ± 1.8% | 1.3 ± 0.5% | 23.9 ± 3.4% | 26.6 ± 10.5% | — | — |
| Pan T Cells CD3 ⁺ | 46.1 ± 12.6% | 75.8 ± 17.3% | 1.0 ± 0.6% | 46.4 ± 22.1% | 19641 | — |
| TCRαβ ⁺ T Cells CD3 ⁺ TCRαβ ⁺ | 25.5 ± 5.0% | 53.0 ± 17.4% | 1.9 ± 0.7% | 36.3 ± 8.4% | 19609 ⁷ | 18609 ⁸ |
| TCRγδ ⁺ T Cells CD3 ⁺ TCRγδ ⁺ | 3.1 ± 0.8% | 2.0 ± 0.7% | 0.6 ± 0.3% | 1.5 ± 0.5% | 19609 ⁷ | 18609 ⁸ |
| CD4 ⁺ T Cells CD3 ⁺ CD4 ⁺ | 22.7 ± 7.8% | 56.3 ± 12.4% | 1.8 ± 1.0% | 40.7 ± 18.2% | 19642 | — |
| Regulatory T Cells CD3 ⁺ CD4 ⁺ CD25 ⁺ | 3.2 ± 0.7% | 4.6 ± 1.2% | 0.3 ± 0.2% | 3.5 ± 1.3% | 19609 ⁷ | — |
| CD8 ⁺ T Cells CD3 ⁺ CD8a ⁺ | 12.8 ± 3.9% | 25.0 ± 0.9% | 2.0 ± 1.0% | 25.1 ± 2.7% | 19643 | — |
| NKT Cells CD3 ⁺ CD161 ⁺ CD172a ⁻ | 1.8 ± 0.9% | 0.2 ± 0.2% | 0.3 ± 0.1% | 0.7 ± 0.2% | 19609 ⁷ | 18609 ⁸ |
| NK Cells CD3 ⁻ CD161 ⁺ CD172a ⁻ | 3.3 ± 0.6% | 0.2 ± 0.3% | 0.2 ± 0.1% | 5.5 ± 0.5% | 19609 ⁷ | 18609 ⁸ |
| Pan B Cells CD3 ⁻ CD45RA ⁺ | 45.3 ± 9.9% | 30.3 ± 11.4% | 35.9 ± 7.0% | 18.4 ± 6.9% | 19644 | — |
| IgM ⁺ B Cells CD3 ⁻ CD45RA ⁺ IgM ⁺ | 15.8 ± 6.4% | 32.8 ± 6.2% | 4.2 ± 1.2% | 10.7 ± 1.7% | — | 18644 |
| IgD ⁺ B Cells CD3 ⁻ CD45RA ⁺ IgD ⁺ | 23.4 ± 2.1% | — | 8.7 ± 0.5% | — | — | 18609 ⁸ |
| CD138 ⁺ CD45RA ⁺ B Cells CD3 ⁻ CD11b ⁻ CD45RA ⁺ CD138 ⁺ | 0.7 ± 0.4% | — | 8.7 ± 4.4% | — | — | — |
| CD138 ⁺ CD45RA ⁻ B Cells CD3 ⁻ CD11b ⁻ CD45RA ⁻ CD138 ⁺ | 0.6 ± 0.4% | — | 0.3 ± 0.3% | — | — | — |
| CD90 ⁺ Cells CD90 ⁺ | 17.2 ± 5.9% | 14.9 ± 2.3% | 31.7 ± 6.5% | 16.7 ± 7.3% | — | 18958 (CD90.1 ⁺) |
| Neutrophils RP-1 ⁺ | 2.9 ± 1.7% | 0.7 ± 0.2% | 11.9 ± 2.4% | 17.8 ± 16.3% | 19609 ⁷ | 18609 ⁸ |

1. Cell type frequencies are for 8 to 24 week old male and female Sprague Dawley rats. 2. Data sourced from STEMCELL Technologies' R&D Scientists. The relative frequencies of Sprague Dawley rat immune cell subsets were characterized by flow cytometry using commercially available fluorochrome-conjugated monoclonal antibodies. 3. Values shown are percentages of total viable leukocytes in each sample (mean ± SD). 4. EasySep™/RoboSep™ Immunomagnetic Isolation. 5. Negative selection labels unwanted cells to isolate desired cells. 6. Positive selection labels and isolates desired cell types. 7. EasySep™ Rat Custom Enrichment Kit. 8. EasySep™ Rat Custom Positive Selection Kit.

Isolate Rat Immune Cells

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