**Table S8. Transcripts for all analyses mapped to immunological CPs**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Exposure  | Survival | Location |
|  |  |  |  |  |  |  |
|  4-1BB Signaling in T Lymphocytes | 1 | 1 | 1 | 1 | 3 | 1 |
|  Activation of IRF by Cytosolic Pattern Recognition Receptors | 1 | 3 | 0 | 5 |   |   |
|  Acute Myeloid Leukemia Signaling |   |   |   |   | 4 | 1 |
|  Acute Phase Response Signaling | 5 | 6 | 4 | 5 | 6 | 3 |
|  Amyloid Processing |   |   | 3 | 1 |   |   |
|  B Cell Activating Factor Signaling | 2 | 2 |   |   | 0 | 2 |
|  B Cell Development |   |   |   |   | 0 | 3 |
|  B Cell Receptor Signaling | 6 | 4 | 7 | 3 | 7 | 5 |
|  Calcium-induced T Lymphocyte Apoptosis | 4 | 3 | 2 | 3 | 2 | 4 |
|  Cardiac Hypertrophy Signaling |   |   | 15 | 4 | 14 | 6 |
|  Caveolar-mediated \Endocytosis Signaling | 6 | 1 | 6 | 2 | 2 | 3 |
|  CCR3 Signaling in Eosinophils | 7 | 2 | 8 | 2 | 8 | 4 |
|  CCR5 Signaling in Macrophages | 3 | 2 | 4 | 3 | 4 | 4 |
|  CD27 Signaling in Lymphocytes |   |   |   |   | 2 | 1 |
|  CD28 Signaling in T Helper Cells | 6 | 5 | 2 | 4 | 3 | 5 |
|  CD40 Signaling |   |   | 3 | 1 | 4 | 1 |
|  Chemokine Signaling |   |   | 8 | 1 | 7 | 1 |
|  Chronic Myeloid Leukemia Signaling |   |   |   |   | 4 | 2 |
|  Clathrin-mediated Endocytosis Signaling | 13 | 1 | 7 | 1 | 9 | 3 |
|  CNTF Signaling | 1 | 2 | 2 | 1 |   |   |
|  CNTF Signaling |   |   |   |   |   |   |
|  Complement System |   |   | 0 | 3 | 0 | 2 |
|  CTLA4 Signaling in Cytotoxic T Lymphocytes | 4 | 3 | 3 | 3 | 5 | 5 |
|  CXCR4 Signaling | 13 | 3 | 10 | 4 | 13 | 5 |
|  Cytotoxic T Lymphocyte-mediated Apoptosis of Target Cells | 1 | 1 |   |   |   |   |
|  Dendritic Cell Maturation |   |   | 3 | 6 | 4 | 5 |
|  Fc Epsilon RI Signaling |   |   | 5 | 1 | 7 | 3 |
|  Fcγ Receptor-mediated Phagocytosis in Macrophages and Monocytes |   |   | 4 | 2 | 6 | 4 |
|  FcγRIIB Signaling in B Lymphocytes |   |   | 1 | 1 | 2 | 2 |
|  FLT3 Signaling in Hematopoietic Progenitor Cells |   |   |   |   | 4 | 2 |
|  fMLP Signaling in Neutrophils | 7 | 4 | 6 | 4 | 7 | 5 |
|  GM-CSF Signaling | 3 | 2 | 4 | 1 | 6 | 2 |
|  iCOS-iCOSL Signaling in T Helper Cells | 6 | 4 | 4 | 4 | 4 | 4 |
|  IL-1 Signaling |   |   |   |   | 7 | 3 |
|  IL-10 Signaling | 3 | 5 | 1 | 3 |   |   |
|  IL-12 Signaling and Production in Macrophages |   |   | 3 | 3 | 6 | 4 |
|  IL-15 Production | 0 | 4 | 1 | 3 | 1 | 4 |
|  IL-15 Signaling |   |   | 2 | 1 | 4 | 3 |
|  IL-17 Signaling |   |   |   |   | 4 | 2 |
| IL-2 Signaling |   |   | 3 | 0 | 5 | 2 |
|  IL-22 Signaling | 0 | 3 | 1 | 2 | 1 | 2 |
|  IL-3 Signaling | 4 | 2 | 4 | 2 | 6 | 4 |
|  IL-4 Signaling |   |   |   |   | 2 | 3 |
|  IL-6 Signaling | 4 | 2 | 3 | 2 |   |   |
|  IL-8 Signaling | 11 | 3 | 9 | 7 | 9 | 8 |
|  IL-9 Signaling | 1 | 2 | 1 | 2 | 2 | 3 |
|  Interferon Signaling | 0 | 2 |   |   | 0 | 2 |
|  Leukocyte Extravasation Signaling | 6 | 7 | 8 | 9 | 8 | 14 |
|  LPS/IL-1 Mediated Inhibition of RXR Function | 7 | 7 |   |   |   |   |
|  LPS-stimulated MAPK Signaling | 4 | 1 | 5 | 2 | 7 | 2 |
|  Macropinocytosis Signaling | 4 | 1 | 3 | 3 | 4 | 5 |
|  Mechanisms of Viral Exit from Host Cells |   |   | 3 | 2 | 5 | 1 |
|  MIF Regulation of Innate Immunity |   |   | 2 | 1 | 2 | 0 |
|  Natural Killer Cell Signaling |   |   | 4 | 4 | 7 | 5 |
|  NF-κB Activation by Viruses |   |   | 4 | 3 | 5 | 6 |
|  NF-κB Signaling | 8 | 3 | 4 | 4 |   |   |
|  Oncostatin M Signaling | 0 | 3 | 1 | 1 | 2 | 2 |
|  p38 MAPK Signaling | 3 | 3 | 3 | 2 |   |   |
|  Primary Immunodeficiency Signaling | 1 | 4 | 1 | 5 | 0 | 5 |
|  Production of Nitric Oxide and Reactive Oxygen Species in Macrophages | 9 | 4 | 6 | 6 | 9 | 7 |
|  Regulation of IL-2 Expression in Activated and Anergic T Lymphocytes |   |   |   |   | 2 | 4 |
|  Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis |   |   | 11 | 8 | 9 | 8 |
|  Role of NFAT in Regulation of the Immune Response | 10 | 7 | 7 | 8 | 7 | 8 |
|  Role of Pattern Recognition Receptors in Recognition of Bacteria and Viruses | 1 | 5 | 2 | 5 | 3 | 4 |
|  Role of PKR in Interferon Induction and Antiviral Response | 2 | 1 | 1 | 2 |   |   |
|  Role of RIG1-like Receptors in Antiviral Innate Immunity | 1 | 2 | 0 | 4 |   |   |
|  T Cell Receptor Signaling | 4 | 6 | 4 | 4 | 4 | 6 |
|  T Helper Cell Differentiation | 1 | 2 |   |   |   |   |
|  Toll-like Receptor Signaling | 3 | 2 |   |   |   |   |
|  TREM1 Signaling |   |   |   |   | 2 | 1 |
|  Virus Entry via Endocytic Pathways |   |   | 6 | 2 | 6 | 4 |
| Total | 176 | 130 | 215 | 166 | 266 | 210 |

This table shows the number of transcripts that mapped to each pathway for all analyses. The majority of the transcripts demonstrated a decrease in expression values. Transcripts were included if they demonstrated a fold change >1 or <-1.