Table S1. GO annotations and genes included in each condition

| Group                                                                 | Gene symbol | Gene name                                                        |
|----------------------------------------------------------------------|-------------|-----------------------------------------------------------------|
| Inflammation                                                         | Il1b        | Interleukine 1 beta                                             |
| GO:0002526, acute inflammatory response; GO:0001774, microglial cell activation; GO:0050729, positive regulation of inflammatory response | Spn         | Sialophorin                                                     |
|                                                                      | Ccl5        | C-C Motif Chemokine Ligand 5                                    |
|                                                                      | Dnase1|3                | Deoxyribonuclease gamma                                         |
|                                                                      | Ccr7        | C-C chemokine receptor type 7                                    |
|                                                                      | F8          | Coagulation factor VIII                                          |
|                                                                      | Il1rn       | Interleukin 1 receptor antagonist                                |
|                                                                      | Saa3        | Serum amyloid A 3                                                |
|                                                                      | Serpinf2    | Serpin family F member 2                                         |
|                                                                      | Sigirr      | Single immunoglobulin domain-containing IL1R-related protein    |
|                                                                      | Clu         | Clusterin                                                       |
|                                                                      | Ager        | Advanced glycosylation end product-specific receptor             |
|                                                                      | Mapt        | Microtubule-associated protein tau                              |
| Potassium channels                                                   | Kcn2        | Potassium Voltage-Gated Channel Subfamily A Member 2             |
|                                                                      | Kcn3        | Potassium Voltage-Gated Channel Subfamily A Member 3             |
|                                                                      | Kcnb2       | Potassium Voltage-Gated Channel Subfamily B Member 2             |
|                                                                      | Kend2       | Potassium Voltage-Gated Channel Subfamily D Member 2             |
|                                                                      | Kend3       | Potassium Voltage-Gated Channel Subfamily D Member 3             |
|                                                                      | Kenc2       | Potassium Voltage-Gated Channel Subfamily C Member 2             |
|                                                                      | Kcnh3       | Potassium Voltage-Gated Channel Subfamily H Member 3             |
|                                                                      | Kcnh1       | Potassium Voltage-Gated Channel Subfamily H Member 1             |
|                                                                      | Kcnh4       | Potassium Voltage-Gated Channel Subfamily H Member 4             |
|                                                                      | Kcnh7       | Potassium Voltage-Gated Channel Subfamily H Member 7             |
|                                                                      | Kcnj3       | Potassium Inwardly Rectifying Channel Subfamily J Member 3      |
|                                                                      | Kcnj10      | Potassium Inwardly Rectifying Channel Subfamily J Member 10     |
|                                                                      | Kcnj15      | Potassium Inwardly Rectifying Channel Subfamily J Member 15     |
|                                                                      | Kcnk1       | Potassium Two Pore Domain Channel Subfamily K Member 1           |
|                                                                      | Kcnk2       | Potassium Two Pore Domain Channel Subfamily K Member 2           |
|                                                                      | Kcnk7       | Potassium Two Pore Domain Channel Subfamily K Member 7           |
|                                                                      | Kcnn2       | Potassium Calcium-Activated Channel Subfamily N Member 2         |
|                                                                      | Kcnn3       | Potassium Calcium-Activated Channel Subfamily N Member 3         |
|                                                                      | Kenrg       | Potassium Channel Regulator                                     |
|                                                                      | Kcnv1       | Potassium Voltage-Gated Channel Modifier Subfamily V Member 1   |
|                                                                      | Kcnip2      | Potassium Voltage-Gated Channel Interacting Protein 2           |
|                                                                      | Kcnmb1      | Potassium Calcium-Activated Channel Subfamily M Regulatory Beta Subunit 1 |
|                                                                      | Kcnmb4      | Potassium Calcium-Activated Channel Subfamily M Regulatory Beta Subunit 4 |
|                                                                      | Kenq2       | Potassium Voltage-Gated Channel Subfamily Q Member 2             |
**Calcium related pathways**

| GO:0051209, release of sequestered calcium into cytosol |
|--------------------------------------------------------|
| Htr2a  | 5-Hydroxytryptamine (serotonin) receptor 2a |
| Htr2b  | 5-Hydroxytryptamine (serotonin) receptor 2b |
| Ryr1   | Ryanodine receptor 1 |
| Ryr2   | Ryanodine receptor 2 |
| Ryr3   | Ryanodine receptor 3 |
| Pled4  | Phospholipase C, delta 4 |
| Plcd1  | Phospholipase C, beta 1 |
| Pled3  | Phospholipase C, delta 3 |
| Pch2   | Phospholipase C, eta 2 |
| Pch1   | Phospholipase C, eta 1 |
| Lck    | Lymphocyte protein tyrosine kinase |
| Xcr1   | Chemokine (C motif) receptor 1 |
| Bbc3   | BCL2 binding component 3 |

| GO:0035584, calcium-mediated signaling using intracellular calcium source |
|---------------------------------------------------------------|
| Kdr               | kinase insert domain protein receptor |
| Homer2            | homer scaffolding protein 2 |
| Ryr2              | Ryanodine receptor 2 |
| Selp              | Selectin, platelet |
| Ntrk2             | Neurotrophic tyrosine kinase, receptor, type 2 |

| GO:0007204, positive regulation of cytosolic calcium ion concentration |
|--------------------------------------------------------------|
| Cacnb4            | Calcium channel, voltage-dependent, L type, beta 4 subunit |
| Ccl28             | Chemokine (C-C motif) ligand 28 |
| Cav1              | Caveolin 1 |
| Synp0             | Synaptopodin |
| Gper1             | G protein-coupled estrogen receptor 1 |
| Bak1              | BCL2 Antagonist/Killer 1 |
| Trpv6             | Transient receptor potential cation channel, subfamily V, member 6 |
| Xcr1              | Chemokine (C motif) receptor 1 |