**Supplemental Table S3. Classification of IL1β- and IL33-responsive genes.** Genes identified as significantly changed by IL1β and IL33 in cardiomyocytes were analysed according to the Panther classification system (http://www.pantherdb.org). Significantly represented (\*p<0.05) pathways for either agonist are shown.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pathway** | **Ref no.** | **IL1β**  **No. in list** | **IL1β**  **Expected no.** | **IL1β +/-** | **IL1β**  **p value** | **IL33**  **No. in list** | **IL33**  **Expected no.** | **IL33**  **+/-** | **IL33**  **p value** |
| Inflammation mediated by chemokine and cytokine signaling pathway | 275 | 19 | 3.03 | + | 4.41E-10\* | 13 | 0.85 | + | 3.93E-12\* |
| Apoptosis signaling pathway | 169 | 13 | 1.86 | + | 7.73E-08\* | 9 | 0.52 | + | 3.47E-09\* |
| Interleukin signaling pathway | 158 | 12 | 1.74 | + | 2.80E-07\* | 4 | 0.49 | + | 1.54E-03\* |
| Toll receptor signaling pathway | 67 | 8 | 0.74 | + | 1.06E-06\* | 5 | 0.21 | + | 2.42E-06\* |
| Transforming growth factor β signaling pathway | 154 | 11 | 1.70 | + | 1.58E-06\* | 5 | .48 | + | 1.26E-04\* |
| Platelet-derived growth factor signaling pathway | 149 | 10 | 1.64 | + | 8.06E-06\* | 2 | 0.46 | + | 7.84E-02 |
| Angiogenesis | 185 | 11 | 2.04 | + | 8.80E-06\* | 4 | 0.57 | + | 2.71E-03\* |
| Plasminogen activating cascade | 18 | 4 | 0.20 | + | 5.42E-05\* | 2 | 0.06 | + | 1.48E-03\* |
| B cell activation | 79 | 6 | 0.87 | + | 2.79E-04\* | 3 | 0.24 | + | 1.98E-03\* |
| Fas signaling pathway | 36 | 4 | 0.40 | + | 7.42E-04\* | 4 | 0.11 | + | 5.52E-06\* |
| Heterotrimeric G-protein signaling - Gq alpha/Go alpha mediated pathway | 136 | 7 | 1.50 | + | 8.85E-04\* | 5 | 0.42 | + | 7.07E-05\* |
| JAK/STAT signaling pathway | 17 | 3 | 0.19 | + | 9.46E-04\* | 0 | 0.05 | - | 9.49E-01 |
| Insulin/IGF pathway-MAP kinase cascade | 30 | 3 | 0.33 | + | 4.68E-03\* | 1 | 0.09 | + | 8.88E-02\* |
| Interferon-gamma signaling pathway | 31 | 3 | 0.34 | + | 5.12E-03\* | 2 | 0.10 | + | 4.28E-03\* |
| Oxidative stress response | 64 | 4 | 0.71 | + | 5.84E-03\* | 2 | 0.2 | + | 1.71E-02\* |
| Phosphatidylinositol 3 kinase pathway | 120 | 5 | 1.32 | + | 1.12E-02\* | 1 | 0.37 | + | 3.11E-01 |
| T cell activation | 121 | 5 | 1.33 | + | 1.16E-02\* | 3 | 0.37 | + | 6.48E-03\* |
| Heterotrimeric G-protein signaling pathway-Gi alpha and Gs alpha mediated pathway | 170 | 6 | 1.87 | + | 1.22E-02\* | 4 | 0.53 | + | 2.00E-03\* |
| Ras pathway | 80 | 4 | 0.88 | + | 1.24E-02\* | 1 | 0.25 | + | 2.20E-01 |
| Integrin signalling pathway | 191 | 6 | 2.11 | + | 2.03E-02\* | 1 | 0.59 | + | 4.48E-01 |
| Epidermal growth factor receptor signalling pathway | 140 | 5 | 1.54 | + | 2.04E-02\* | 1 | 0.43 | + | 3.53E-01 |
| Blood coagulation | 55 | 3 | 0.61 | + | 2.36E-02\* | 3 | 0.17 | + | 7.04E-04\* |
| Transcription regulation by bZIP transcription factor | 64 | 3 | 0.71 | + | 3.46E-02\* | 0 | 0.20 | - | 8.20E-01 |
| Axon guidance mediated by Slit/Robo | 29 | 2 | 0.32 | + | 4.13E-02\* | 0 | 0.12 | - | 8.83E-01 |
| Xanthine and guanine salvage pathway | 4 | 1 | 0.04 | + | 4.31E-02\* | 0 | 0.01 | - | 9.88E-01 |
| p53 pathway | 181 | 5 | 2.00 | + | 5.16E-02 | 3 | 0.56 | + | 1.90E-02\* |
| Endothelin signalling pathway | 93 | 2 | 1.03 | + | 2.74E-01 | 2 | 0.29 | + | 3.41E-02\* |
| Unclassified | 24696 | 215 | 272.24 | - | 4.93E-19 | 45 | 76.51 | - | 2.03E-17 |