Table 5 Top 10 altered canonical pathways, sorted by –log10 (P) value via IPA

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| Pathways | -log10 (p-value) | Involved Molecules |
| Neuropathic Pain Signaling In Dorsal Horn Neurons | 3.01 | TACR1, GRM7, KCNN3, CAMK1D, MAPK1, GPR37, BDNF, GRM3, GRIA1, CREB1, TAC1, GRIN3A |
| Cardiomyocyte Differentiation via BMP Receptors | 3.01 | NKX2-5, MAP3K7, SMAD6, MEF2C, BMP10 |
| cAMP-mediated Signaling | 2.75 | ENPP6, ADCY2, RGS18, MAPK1, CAMK1D, PTGER3, GRM3, DUSP6, GNAI1, CHRM3, Cngb1, GRM7, FSHR, RGS10, CREB1, HTR1F, DRD3, PTGER4, PPP3CA |
| Estrogen Biosynthesis | 2.64 | CYP4F8, CYP3A5, HSD17B7, CYP2C9, CYP2A6 (includes others), CYP51A1, CYP2C8 |
| PXR/RXR Activation | 2.63 | CYP3A5, ABCC2, INS, CYP2C9, CYP2A6 (includes others), INSR, PAPSS2, Ins1, CYP2C8 |
| Wnt/β-catenin Signaling | 2.43 | CDKN2A, GJA1, WNT3, APPL2, APC, SOX17, SOX2, FZD8, PPP2R1A, WNT7A, RARB, TLE4, MAP3K7, NR5A2, GSK3B |
| BMP Signaling Pathway | 2.43 | MAP2K4, NKX2-5, MAPK1, BMP8A, CREB1, MAP3K7, SMAD6, GREM1, BMP10 |
| Factors Promoting Cardiogenesis in Vertebrates | 2.41 | FZD8, SMAD2, NKX2-5, WNT3, BMP8A, MAP3K7, MEF2C, GSK3B, BMP10, APC |
| Glutamate Receptor Signaling | 2.40 | GRM7, SLC1A4, GRM3, GRIA1, SLC38A1, GRIP1, GRIK2, GRIN3A |
| Human Embryonic Stem Cell Pluripotency | 2.39 | SOX2, FZD8, SMAD2, WNT7A, WNT3, BDNF, BMP8A, SMAD6, GSK3B, NGF, APC, INHBA, BMP10 |
| LPS/IL-1 Mediated Inhibition of RXR Function | 2.37 | MAP2K4, GAL3ST2, ABCC2, CYP2C9, APOC2, NDST4, PAPSS2, IL1R2, TLR4, UST, CYP3A5, Sult1c2 (includes others), MAP3K7, NR5A2, CYP2A6 (includes others), GSTP1, MAOA, CYP2C8 |