Supplementary Table S5. Canonical Pathway of Genes Regulated by Human Mesenchymal Stem Cells in Response to 10% Uniaxial Cyclic Tensile Strain in Three-Dimensional Collagen Culture

Canonical pathways	*−log (p-value)*	*Ratio*	*Molecules*
Human embryonic stem cell pluripotency	3.75E+00	3.33E-02	*FZD8, TCF4, PIK3CD, WNT5B, BMP1*
Basal cell carcinoma signaling	3.72E+00	5.48E-02	*FZD8, TCF4, WNT5B, BMP1*
Ovarian cancer signaling	3.69E+00	3.52E-02	*VEGFA, FZD8, TCF4, PIK3CD, WNT5B*
Glioblastoma multiforme signaling	3.43E+00	2.98E-02	*FZD8, ITPR3, IGF1R, PIK3CD, WNT5B*
Role of NANOG in mammalian embryonic stem cell pluripotency	2.99E+00	3.51E-02	*FZD8, PIK3CD, WNT5B, BMP1*
Glioma invasiveness signaling	2.79E+00	5.00E-02	*PLAUR, PIK3CD, PLAU*
Role of osteoblasts, osteoclasts, and chondrocytes in rheumatoid arthritis	2.71E+00	2.09E-02	*FZD8, TCF4, PIK3CD, WNT5B, BMP1*
Molecular mechanisms of cancer	2.59E+00	1.59E-02	*FZD8, TCF4, RALA, IRS1, PIK3CD, BMP1*
Growth hormone signaling	2.57E+00	4.00E-02	*IRS1, IGF1R, PIK3CD*
Colorectal cancer metastasis signaling	2.54E+00	1.95E-02	*VEGFA, FZD8, TCF4, PIK3CD, WNT5B*
Role of Wnt/GSK-3β signaling in the pathogenesis of influenza	2.40E+00	3.70E-02	*FZD8, TCF4, WNT5B*
Nitric oxide signaling in the cardiovascular system	2.38E+00	3.00E-02	*VEGFA, ITPR3, PIK3CD*
Axonal guidance signaling	2.29E+00	1.40E-02	*VEGFA, FZD8, ADAM12, PIK3CD, WNT5B, BMP1*
Factors promoting cardiogenesis in vertebrates	2.27E+00	3.16E-02	*FZD8, TCF4, BMP1*
Mouse embryonic stem cell pluripotency	2.16E+00	3.03E-02	*FZD8, TCF4, PIK3CD*
IGF-1 signaling	2.12E+00	2.83E-02	*IRS1, IGF1R, PIK3CD*
Role of macrophages, fibroblasts, and endothelial cells in rheumatoid arthritis	2.10E+00	1.50E-02	*VEGFA, FZD8, TCF4, PIK3CD, WNT5B*
IL-9 signaling	2.07E+00	5.00E-02	*IRS1, PIK3CD*
Coagulation system	2.05E+00	5.26E-02	*PLAUR, PLAU*
Pancreatic adenocarcinoma signaling	2.03E+00	2.52E-02	*VEGFA, RALA, PIK3CD*
Role of tissue factor in cancer	2.00E+00	2.63E-02	*VEGFA, PLAUR, PIK3CD*
Corticotropin releasing hormone signaling	1.97E+00	2.21E-02	*VEGFA, ITPR3, JUND*
Insulin receptor signaling	1.83E+00	2.21E-02	*IRS1, PIK3CD, STX4*
EGF signaling	1.82E+00	3.85E-02	*ITPR3, PIK3CD*
eNOS signaling	1.79E+00	1.99E-02	*VEGFA, ITPR3, PIK3CD*
PI3K signaling in B lymphocytes	1.78E+00	2.10E-02	*IRS1, ITPR3, PIK3CD*
Myc-mediated apoptosis signaling	1.61E+00	3.28E-02	*IGF1R, PIK3CD*
Estrogen-dependent breast cancer signaling	1.60E+00	2.86E-02	*IGF1R, PIK3CD*
Aldosterone signaling in epithelial cells	1.58E+00	1.73E-02	*ITPR3, PIK3CD, DNAJC7*
Role of JAK1 and JAK3 in γc cytokine signaling	1.57E+00	2.99E-02	*IRS1, PIK3CD*
Nonsmall cell lung cancer signaling	1.54E+00	2.53E-02	*ITPR3, PIK3CD*
Wnt/β-catenin signaling	1.50E+00	1.74E-02	*FZD8, TCF4, WNT5B*
IL-4 signaling	1.50E+00	2.74E-02	*IRS1, PIK3CD*
Renal cell carcinoma signaling	1.48E+00	2.70E-02	*VEGFA, PIK3CD*
BMP signaling pathway	1.45E+00	2.50E-02	*FST, BMP1*
Prolactin signaling	1.44E+00	2.50E-02	*IRS1, PIK3CD*
NRF2-mediated oxidative stress response	1.43E+00	1.57E-02	*JUND, PIK3CD, DNAJC7*
VEGF family ligand–receptor interactions	1.41E+00	2.38E-02	*VEGFA, PIK3CD*
Role of NFAT in cardiac hypertrophy	1.41E+00	1.43E-02	*ITPR3, IGF1R, PIK3CD*
Clathrin-mediated endocytosis Signaling	1.40E+00	1.54E-02	*VEGFA, CLU, PIK3CD*
Acute myeloid leukemia signaling	1.40E+00	2.44E-02	*TCF4, PIK3CD*
ILK signaling	1.40E+00	1.56E-02	*VEGFA, IRS1, PIK3CD*
mTOR signaling	1.36E+00	1.42E-02	*VEGFA, IRS1, PIK3CD*
Sphingolipid metabolism	1.36E+00	1.82E-02	*SGPL1, SPTLC2*