

**Table S4: Pathway Maps for Day 14**

		BMP-2		TGF- $\beta$ 1		BMP-2 and TGF- $\beta$ 1	
Maps	Min (p-value)	p-value	Genes from Active Data	p-value	Genes from Active Data	p-value	Genes from Active Data
Development_MAG-dependent inhibition of neurite outgrowth	3.119E-09	1.022E-05	NGFR(TNFRSF16), BDNF, NGFR (ICD), NGFR (CTF)	3.119E-09	NGFR(TNFRSF16), Actin cytoskeletal, BDNF, NGFR (ICD), NGFR (CTF), RhoA	8.435E-04	NGFR(TNFRSF16), NGFR (ICD), NGFR (CTF)
Development_Regulation of epithelial-to-mesenchymal transition (EMT)	2.641E-08	3.643E-06	IL-1 beta, PDGF-R-beta, Frizzled, NOTCH1 receptor, TGF-beta 3	1.597E-03	ACTB, MMP-2, TGF-beta 3	2.641E-08	IL-1 beta, ACTA2, Frizzled, MMP-2, NOTCH1 receptor, TGF-beta 3, TNF-alpha
Cell adhesion_Role of tetraspanins in the integrin-mediated cell adhesion	1.895E-07	8.506E-03	alpha-6/beta-1 integrin, ITGB1	1.895E-07	alpha-6/beta-1 integrin, ITGB1, Actin cytoskeletal, Actin, RhoA	8.435E-04	ITGB1, FAK1, Actin
Development_Notch Signaling Pathway	4.865E-07	4.865E-07	HDAC1, NOTCH1 (NICD), NOTCH1 (NEXT), NOTCH1 precursor, NOTCH1 receptor	1.464E-01	HDAC1	2.231E-06	NOTCH1 (NICD), NOTCH1 (NEXT), NOTCH1 precursor, NOTCH1 receptor, PCAF
Development_TGF-beta-dependent induction of EMT via RhoA, PI3K and ILK.	5.822E-07	1.294E-02	TGF-beta 3, Beta-catenin	5.822E-07	ACTB, TGF-beta 3, Actin, Beta-catenin, RhoA	3.142E-06	ACTA2, SMURF1, TGF-beta 3, Actin, Beta-catenin
Cell adhesion_Chemokines and adhesion	1.362E-06	6.205E-03	VEGF-A, VEGFR-2, Beta-catenin	1.362E-06	Actin cytoskeletal, MMP-2, VEGFR-2, Actin, Beta-catenin, RhoA	1.006E-05	MMP-2, VEGFR-2, FAK1, CD44, Actin, Beta-catenin
Development_TGF-beta-dependent induction of EMT via MAPK	3.503E-06	7.127E-04	ITGB1, TGF-beta, TGF-beta 3	2.361E-05	ITGB1, TGF-beta, MMP-2, TGF-beta 3	3.503E-06	ITGB1, TGF-beta, MMP-2, FAK1, TGF-beta 3
Chemotaxis_Leukocyte chemotaxis	6.804E-06	3.243E-02	ITGB1, VCAM1	6.804E-06	ITGB1, Actin cytoskeletal, VCAM1, Actin, RhoA	6.411E-03	ITGB1, VCAM1, Actin
Development_NOTCH1-mediated pathway for NF-KB activity modulation	7.231E-06	7.231E-06	HDAC1, NOTCH1 (NICD), NOTCH1 (NEXT), NOTCH1 receptor	1.176E-01	HDAC1	2.405E-05	NOTCH1 (NICD), NOTCH1 (NEXT), NOTCH1 receptor, PCAF
Transcription_Role of VDR in regulation of genes involved in osteoporosis	1.289E-05	1.526E-03	IL-1 beta, IGF-1, Osteocalcin	1.390E-03	RUNX2, IGF-1, Osteocalcin	1.289E-05	IL-1 beta, IFN-gamma, IGF-1, Osteocalcin, TNF-alpha