

Table S2: Go Processes Day 21

		BMP-2		TGF- β 1		BMP-2 and TGF- β 1	
Processes	Min (p-Value)	p-value	Genes from Active Data	p-value	Genes from Active Data	p-value	Genes from Active Data
regulation of multicellular organismal development	5.959E-37	5.959E-37	GDF5, BMP6, IL-1 beta, SMURF, NGFR(TNFRSF16), IFN-gamma, COL1A1, HNF1, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, BMP2, EGF, HGF, PPAR-gamma, MGF, TGF-beta, Endoglin, PDGF receptor, SMURF1, BDNF, GDF7, ErbB2, IGF-1, VEGFR-2, Osteocalcin, Oct-3/4, FAK1, SOX2, IL-10, PAX8/PPARgamma fusion protein, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Integrin, CD133, BMP4, Beta-catenin	2.437E-29	GDF5, IL-1 beta, SMURF, alpha-6/beta-1 integrin, IFN-gamma, VEGF-A, HNF1, LIF, PDGF-R-beta, CD45, ITGB1, EGF, MGF, TGF-beta, Endoglin, PDGF receptor, SMURF1, BDNF, GDF7, ErbB2, IGF-1, VEGFR-2, FAK1, WNT, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Integrin, SMAD4, CD133, BMP4, WNT3A, Beta-catenin	2.673E-33	GDF5, IL-1 beta, SMURF, alpha-6/beta-1 integrin, NGFR(TNFRSF16), IFN-gamma, VEGF-A, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, ITGB1, EGF, PPAR-gamma, MGF, TGF-beta, Endoglin, PDGF receptor, SMURF1, BDNF, GDF7, ErbB2, Osteocalcin, FAK1, IL-10, PAX8/PPARgamma fusion protein, WNT, CD44, TGF-beta 3, TNF-alpha, TGF-beta 1, Thy-1, Integrin, CD133, TBX5, WNT3A, BMP7, Beta-catenin
organ development	4.959E-36	4.959E-36	GDF5, BMP6, Caspase-3, NGFR(TNFRSF16), IFN-gamma, COL1A1, HNF1, ITGAX, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, BMP2, EGF, HGF, PPAR-gamma, ACTA2, MGF, TGF-beta, G-CSF, Endoglin, PDGF receptor, REX1, MMP-2, BDNF, GDF7, ErbB2, MDR1, 5'-NTD, IGF-1, VEGFR-2, ITGA6,	5.300E-27	GDF5, alpha-6/beta-1 integrin, IFN-gamma, VEGF-A, HNF1, ITGAX, LIF, PDGF-R-beta, CD45, ITGB1, EGF, ACTA2, MGF, TGF-beta, G-CSF, Endoglin, PDGF receptor, MMP-2, BDNF, GDF7, ErbB2, 5'-NTD, IGF-1, VEGFR-2, ITGA6, VCAM1, FAK1, Actin	4.747E-32	GDF5, alpha-6/beta-1 integrin, Caspase-3, NGFR(TNFRSF16), IFN-gamma, VEGF-A, ITGAX, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, ITGB1, EGF, PPAR-gamma, ACTA2, MGF, TGF-beta, G-CSF, Endoglin, PDGF receptor, REX1, MMP-2, BDNF, GDF7, ErbB2, 5'-NTD, ITGA6, Osteocalcin,

			Osteocalcin, Oct-3/4, FAK1, SOX2, IL-10, PAX8/PPARgamma fusion protein, Actin muscle, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Actin, Integrin, CD133, HNF1-alpha, BMP4, Beta-catenin		muscle, WNT, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Actin, Integrin, SMAD4, CD133, HNF1-alpha, BMP4, WNT3A, Beta-catenin		VCAM1, FAK1, IL-10, PAX8/PPARgamma fusion protein, Actin muscle, WNT, CD44, TGF-beta 3, TNF-alpha, TGF-beta 1, Thy-1, Actin, Integrin, CD133, TBX5, WNT3A, BMP7, Beta-catenin
organ morphogenesis	1.336E-33	1.336E-33	BMP6, NGFR(TNFRSF16), COL1A1, HNF1, ITGAX, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, BMP2, HGF, PPAR-gamma, TGF-beta, Endoglin, PDGF receptor, MMP-2, GDF7, IGF-1, ITGA6, Osteocalcin, FAK1, SOX2, PAX8/PPARgamma fusion protein, Actin muscle, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Actin, Integrin, CD133, HNF1-alpha, BMP4, Beta-catenin	1.464E-25	alpha-6/beta-1 integrin, VEGF-A, HNF1, ITGAX, LIF, PDGF-R-beta, TGF-beta, Endoglin, PDGF receptor, MMP-2, GDF7, IGF-1, ITGA6, FAK1, Actin muscle, WNT, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Actin, Integrin, SMAD4, CD133, HNF1-alpha, BMP4, WNT3A, Beta-catenin	1.638E-29	alpha-6/beta-1 integrin, NGFR(TNFRSF16), VEGF-A, ITGAX, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, PPAR-gamma, TGF-beta, Endoglin, PDGF receptor, MMP-2, GDF7, ITGA6, Osteocalcin, FAK1, PAX8/PPARgamma fusion protein, Actin muscle, WNT, CD44, TGF-beta 3, TNF-alpha, TGF-beta 1, Thy-1, Actin, Integrin, CD133, TBX5, WNT3A, BMP7, Beta-catenin
system development	1.782E-33	1.782E-33	GDF5, BMP6, SMURF, Caspase-3, NGFR(TNFRSF16), IFN-gamma, COL1A1, HNF1, ITGAX, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, BMP2, EGF, HGF, PPAR-gamma, ACTA2, MGF, TGF-beta, G-CSF, Endoglin, PDGF receptor, REX1, SMURF1, MMP-2, BDNF, GDF7,	1.764E-26	GDF5, SMURF, alpha-6/beta-1 integrin, IFN-gamma, VEGF-A, HNF1, ITGAX, LIF, PDGF-R-beta, CD45, ITGB1, EGF, ACTA2, MGF, TGF-beta, G-CSF, Endoglin, PDGF receptor, SMURF1, MMP-2, BDNF, GDF7, ErbB2, 5'-NTD, IGF-1,	4.594E-30	GDF5, SMURF, alpha-6/beta-1 integrin, Caspase-3, NGFR(TNFRSF16), IFN-gamma, VEGF-A, ITGAX, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, ITGB1, EGF, PPAR-gamma, ACTA2, MGF, TGF-beta, G-CSF, Endoglin, PDGF receptor, REX1, SMURF1, MMP-2, BDNF,

			ErbB2, MDR1, 5'-NTD, IGF-1, VEGFR-2, ITGA6, Osteocalcin, Oct-3/4, FAK1, SOX2, IL-10, PAX8/PPARgamma fusion protein, Actin muscle, CD166, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Actin, Integrin, CD133, HNF1-alpha, BMP4, Beta-catenin		VEGFR-2, ITGA6, VCAM1, CD13, FAK1, Actin muscle, WNT, CD166, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Actin, Integrin, SMAD4, CD133, HNF1-alpha, BMP4, WNT3A, Beta-catenin		GDF7, ErbB2, 5'-NTD, ITGA6, Osteocalcin, VCAM1, FAK1, IL-10, PAX8/PPARgamma fusion protein, Actin muscle, WNT, CD166, CD44, TGF-beta 3, TNF-alpha, TGF-beta 1, Thy-1, Actin, Integrin, CD133, TBX5, WNT3A, BMP7, Beta-catenin
regulation of developmental process	6.790E-33	6.790E-33	GDF5, BMP6, IL-1 beta, SMURF, NGFR(TNFRSF16), IFN-gamma, COL1A1, HNF1, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, BMP2, EGF, HGF, PPAR-gamma, MGF, TGF-beta, Endoglin, PDGF receptor, SMURF1, BDNF, GDF7, ErbB2, IGF-1, VEGFR-2, Osteocalcin, Oct-3/4, FAK1, SOX2, IL-10, PAX8/PPARgamma fusion protein, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Integrin, CD133, BMP4, Beta-catenin	5.578E-26	GDF5, IL-1 beta, SMURF, alpha-6/beta-1 integrin, IFN-gamma, VEGF-A, HNF1, LIF, PDGF-R-beta, CD45, ITGB1, EGF, MGF, TGF-beta, Endoglin, PDGF receptor, SMURF1, BDNF, GDF7, ErbB2, IGF-1, VEGFR-2, FAK1, WNT, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Integrin, SMAD4, CD133, BMP4, WNT3A, Beta-catenin	1.250E-29	GDF5, IL-1 beta, SMURF, alpha-6/beta-1 integrin, NGFR(TNFRSF16), IFN-gamma, VEGF-A, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, ITGB1, EGF, PPAR-gamma, MGF, TGF-beta, Endoglin, PDGF receptor, SMURF1, BDNF, GDF7, ErbB2, Osteocalcin, FAK1, IL-10, PAX8/PPARgamma fusion protein, WNT, CD44, TGF-beta 3, TNF-alpha, TGF-beta 1, Thy-1, Integrin, CD133, TBX5, WNT3A, BMP7, Beta-catenin
tissue development	1.946E-32	1.946E-32	GDF5, BMP6, SMURF, Caspase-3, NGFR(TNFRSF16), COL1A1, HNF1, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, BMP2, HGF, PPAR-gamma, ACTA2, MGF, TGF-beta, Endoglin, PDGF	7.819E-24	GDF5, SMURF, alpha-6/beta-1 integrin, VEGF-A, HNF1, LIF, PDGF-R-beta, ITGB1, ACTA2, MGF, TGF-beta, Endoglin, PDGF receptor, SMURF1, MMP-2, GDF7,	7.365E-29	GDF5, SMURF, alpha-6/beta-1 integrin, Caspase-3, NGFR(TNFRSF16), VEGF-A, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, ITGB1, PPAR-gamma, ACTA2, MGF, TGF-beta, Endoglin, PDGF

			receptor, SMURF1, MMP-2, GDF7, ErbB2, IGF-1, VEGFR-2, Osteocalcin, Oct-3/4, SOX2, IL-10, PAX8/PPARgamma fusion protein, Actin muscle, CD44, TGF-beta 1, FGF10, Actin, CD133, HNF1-alpha, BMP4, Beta-catenin		ErbB2, IGF-1, VEGFR-2, VCAM1, Actin muscle, WNT, CD44, TGF-beta 1, FGF10, Actin, SMAD4, CD133, HNF1-alpha, BMP4, WNT3A, Beta-catenin		receptor, SMURF1, MMP-2, GDF7, ErbB2, Osteocalcin, VCAM1, IL-10, PAX8/PPARgamma fusion protein, Actin muscle, WNT, CD44, TGF-beta 1, Actin, CD133, TBX5, WNT3A, BMP7, Beta-catenin
regulation of multicellular organismal process	1.965E-31	1.965E-31	GDF5, BMP6, IL-1 beta, Annexin V, SMURF, NGFR(TNFRSF16), IFN-gamma, COL1A1, HNF1, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, BMP2, EGF, HGF, PPAR-gamma, MGF, TGF-beta, Endoglin, PDGF receptor, SMURF1, MMP-2, BDNF, GDF7, ErbB2, IGF-1, VEGFR-2, Osteocalcin, Oct-3/4, FAK1, SOX2, IL-10, PAX8/PPARgamma fusion protein, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Integrin, CD133, BMP4, Beta-catenin	2.421E-26	GDF5, IL-1 beta, Annexin V, SMURF, alpha-6/beta-1 integrin, IFN-gamma, VEGF-A, HNF1, LIF, PDGF-R-beta, CD45, ITGB1, EGF, MGF, TGF-beta, Endoglin, PDGF receptor, SMURF1, MMP-2, BDNF, GDF7, ErbB2, IGF-1, VEGFR-2, CD13, FAK1, WNT, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Integrin, SMAD4, CD133, BMP4, WNT3A, Beta-catenin	3.492E-27	GDF5, IL-1 beta, SMURF, alpha-6/beta-1 integrin, NGFR(TNFRSF16), IFN-gamma, VEGF-A, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, ITGB1, EGF, PPAR-gamma, MGF, TGF-beta, Endoglin, PDGF receptor, SMURF1, MMP-2, BDNF, GDF7, ErbB2, Osteocalcin, FAK1, IL-10, PAX8/PPARgamma fusion protein, WNT, CD44, TGF-beta 3, TNF-alpha, TGF-beta 1, Thy-1, Integrin, CD133, TBX5, WNT3A, BMP7, Beta-catenin
anatomical structure morphogenesis	2.118E-31	2.118E-31	GDF5, BMP6, NGFR(TNFRSF16), COL1A1, HNF1, ITGAX, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, BMP2, EGF, HGF, PPAR-gamma, TGF-beta, Endoglin, PDGF receptor, MMP-2, BDNF, GDF7, ErbB2, IGF-1,	1.186E-27	GDF5, alpha-6/beta-1 integrin, VEGF-A, HNF1, ITGAX, LIF, PDGF-R-beta, CD45, ITGB1, EGF, TGF-beta, Endoglin, PDGF receptor, MMP-2, BDNF, GDF7, ErbB2, IGF-1, VEGFR-2, ITGA6,	1.671E-28	GDF5, alpha-6/beta-1 integrin, NGFR(TNFRSF16), VEGF-A, ITGAX, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, ITGB1, EGF, PPAR-gamma, TGF-beta, Endoglin, PDGF receptor, MMP-2, BDNF, GDF7, ErbB2, ITGA6,

			VEGFR-2, ITGA6, Osteocalcin, Oct-3/4, FAK1, SOX2, IL-10, PAX8/PPARgamma fusion protein, Actin muscle, CD166, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Actin, Integrin, CD133, HNF1-alpha, BMP4, Beta-catenin		VCAM1, CD13, FAK1, Actin muscle, WNT, CD166, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Actin, Integrin, SMAD4, CD133, HNF1-alpha, BMP4, WNT3A, Beta-catenin		Osteocalcin, VCAM1, FAK1, IL-10, PAX8/PPARgamma fusion protein, Actin muscle, WNT, CD166, CD44, TGF-beta 3, TNF-alpha, TGF-beta 1, Thy-1, Actin, Integrin, CD133, TBX5, WNT3A, BMP7, Beta-catenin
multicellular organismal development	2.608E-31	2.608E-31	GDF5, BMP6, IL-1 beta, SMURF, Caspase-3, NGFR(TNFRSF16), IFN-gamma, COL1A1, HNF1, ITGAX, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, BMP2, EGF, HGF, PPAR-gamma, ACTA2, MGF, TGF-beta, G-CSF, Endoglin, PDGF receptor, REX1, SMURF1, MMP-2, BDNF, GDF7, ErbB2, MDR1, 5'-NTD, IGF-1, VEGFR-2, ITGA6, Osteocalcin, Oct-3/4, FAK1, SOX2, IL-10, PAX8/PPARgamma fusion protein, Actin muscle, CD166, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Actin, Integrin, CD133, HNF1-alpha, BMP4, Beta-catenin	1.036E-24	GDF5, IL-1 beta, SMURF, alpha-6/beta-1 integrin, IFN-gamma, VEGF-A, HNF1, ITGAX, LIF, PDGF-R-beta, CD45, ITGB1, EGF, ACTA2, MGF, TGF-beta, G-CSF, Endoglin, PDGF receptor, SMURF1, MMP-2, BDNF, GDF7, ErbB2, 5'-NTD, IGF-1, VEGFR-2, ITGA6, VCAM1, CD13, FAK1, Actin muscle, WNT, CD166, CD44, TGF-beta 3, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Actin, Integrin, SMAD4, CD133, HNF1-alpha, BMP4, WNT3A, Beta-catenin	8.923E-30	GDF5, IL-1 beta, SMURF, alpha-6/beta-1 integrin, Caspase-3, NGFR(TNFRSF16), IFN-gamma, VEGF-A, ITGAX, G3P2, RUNX2, HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, ITGB1, EGF, PPAR-gamma, ACTA2, MGF, TGF-beta, G-CSF, Endoglin, PDGF receptor, REX1, SMURF1, MMP-2, BDNF, GDF7, ErbB2, 5'-NTD, ITGA6, Osteocalcin, VCAM1, FAK1, IL-10, PAX8/PPARgamma fusion protein, Actin muscle, WNT, CD166, CD44, TGF-beta 3, TNF-alpha, TGF-beta 1, Thy-1, Actin, Integrin, CD133, TBX5, WNT3A, BMP7, Beta-catenin
cell differentiation	9.206E-31	9.206E-31	GDF5, BMP6, SMURF, Caspase-3, NGFR(TNFRSF16), IFN-gamma, COL1A1, HNF1, RUNX2, HDAC1,	5.854E-25	GDF5, SMURF, alpha-6/beta-1 integrin, IFN-gamma, VEGF-A, HNF1, LIF, PDGF-R-beta,	8.981E-30	GDF5, SMURF, alpha-6/beta-1 integrin, Caspase-3, NGFR(TNFRSF16), IFN-gamma, VEGF-A, RUNX2,

		<p>Histone deacetylase class I, LIF, PDGF-R-beta, BMP2, HGF, PPAR-gamma, ACTA2, MGF, TGF-beta, G-CSF, Endoglin, PDGF receptor, REX1, SMURF1, MMP-2, BDNF, GDF7, ErbB2, IGF-1, VEGFR-2, ITGA6, Osteocalcin, Oct-3/4, FAK1, SOX2, IL-10, PAX8/PPARgamma fusion protein, Actin muscle, CD166, CD44, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Actin, Integrin, CD133, BMP4, Beta-catenin</p>	<p>CD45, ITGB1, ACTA2, MGF, TGF-beta, G-CSF, Endoglin, PDGF receptor, SMURF1, MMP-2, BDNF, GDF7, ErbB2, IGF-1, VEGFR-2, ITGA6, VCAM1, CD13, FAK1, Actin muscle, WNT, CD166, CD44, TGF-beta 1, TNF-alpha, FGF10, Thy-1, Actin, Integrin, SMAD4, CD133, BMP4, WNT3A, Beta-catenin</p>	<p>HDAC1, Histone deacetylase class I, LIF, PDGF-R-beta, ITGB1, PPAR-gamma, ACTA2, MGF, TGF-beta, G-CSF, Endoglin, PDGF receptor, REX1, SMURF1, MMP-2, BDNF, GDF7, ErbB2, ITGA6, Osteocalcin, VCAM1, FAK1, IL-10, PAX8/PPARgamma fusion protein, Actin muscle, WNT, CD166, CD44, TNF-alpha, TGF-beta 1, Thy-1, Actin, Integrin, CD133, TBX5, WNT3A, BMP7, Beta-catenin</p>
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