

Supplementary Data: TGF $\beta$  superfamily primers and conditions for RTPCR

Ligand	Positive control	Primer sequence	Product size (bp)	Annealing temp. (C)
Activin $\beta$ A <sup>*</sup>	Term placenta	CGAGGAAGTGGGCTTAAAGGG TCACAGGCAATCCGAACGTCCAG	159	59.2
Activin $\beta$ B <sup>*</sup>	Term placenta	GTGAAGCGGCACATCTTGAG GCGAAGCTGATGATTTTCGGAAA	209	63.4
BMP2	Pregnant mouse endometrium	CCCCCTACATGCTAGACCTGT ACATCGTTTCTGGTAGTTCTTCC	150	63.4
BMP4	Mature rat ovary	TTCCTGGTAACCGAATGCTGA CCCTGAATCTCGGCGACTTTT	115	64.8
BMP7	Cycling mouse endometrium	TCGGCACCCATGTTCATGC TCGGACTGGCCCTGAAGAAA	98	64.8
GDF5 (Nakamura <i>et al.</i> , 2003)	Rat ovary	ATGAGACTCCCCAAACTCCTCAC TGTCTGCCTGGTGCCTCCCT	249	64.8
GDF8 (Milan <i>et al.</i> , 2004)	Mouse heart	CATGATCTTGCTGTAACCTTCC CGATAATCCAATCCCATCC	360	63.4
GDF11	Term placenta	GATCCTGGACCTACACGACTT GGCCATGCTAATGACGGTCT	103	64.8
Nodal (Munir <i>et al.</i> , 2004)	JEG3 cells	AGACATCATCCGCAGCCTACA GTCCATCTGAAACCGCTCTAAG	330	59.2
TGF $\beta$ 1	Term placenta	CTGCATCTGGTCACGGTCG CCTCGGGCTCAGGATACTCT	201	63.4
TGF $\beta$ 2	Term Placenta	TCAGCCTCTCTGTCCACTT CATCACCGTTGGCTCAGGG	151	65.1
TGF $\beta$ 3	Term Placenta	GGCCAGATCCTGTCCAAGC GTGGGTTTCCACCATTAGCAC	128	56.8

<sup>\*</sup> Sequences provided by W. Vale at Salk Institute. All other primer sequences were chosen from Primerbank<sup>®</sup>, or from cited references.

### **References for Supplementary Data**

Milan G, Dalla Nora E, Pilon C, Pagano C, Granzotto M, Manco M, Mingrone G and Vettor R (2004) Changes in muscle myostatin expression in obese subjects after weight loss. *J Clin Endocrinol Metab* 89, 2724-2727.

Munir S, Xu G, Wu Y, Yang B, Lala PK and Peng C (2004) Nodal and ALK7 inhibit proliferation and induce apoptosis in human trophoblast cells. *J Biol Chem* 279, 31277-31286.

Nakamura T, Yamamoto M, Tamura M and Izumi Y (2003) Effects of growth/differentiation factor-5 on human periodontal ligament cells. *J Periodontal Res* 38, 597-605.