

Supplementary Table 1. Primers used for RT-qPCR.

Gene	Name	Forward	Reverse
ALPL	Tissue-nonspecific alkaline phosphatase	ACCCCAAAGGCTTCTTCTTG	TTGGCTTTTCCTTCATGGTG
BMP2	Bone morphogenic protein 2	CAGACCACCGGTTGGAGAGG	CCGGGTTGTTTTCCCACTCG
BGLAP	Bone Gamma-Carboxyglutamate Protein (Osteocalcin)	ACACTCCTCGCCCTATTGGC	GCACCTTTGCTGGACTCTGC
COL1A1	Collagen, type 1, alpha 1	CTGCCTGGTGAGAGAGGTGG	GGACCTTCAGAGCCTCGGG
SPP1	Secreted phosphoprotein 1 (Osteopontin)	GGCCGAGGTGATAGTGTGGT	CCACGGCTGTCCCAATCAGA
RUNX2	Runt-related transcription factor 2	CAGCCACCGAGACCAACAGA	GCTGACATGGTGTCACTGTGC
SP7	Sp7 Transcription Factor (Osterix)	CCTGAGTGGAAACAGGAGTGG A	AGGGAGGACGCCATCCTGA G
18S	18S rRNA	CTTAGAGGGACAAGTGGCG	ACGCTGAGCCAGTCAGTGTA

Primers were designed using the 'Pick primers' tool on the NCBI Nucleotide database and validated using in silico PCR on UCSC against the GRCh37/hg19 Human Feb. 2009 Assembly.

Supplementary Table 2. Candidates screened for effects on the hFOb cell line.

Candidate	Source	Dose
LY294004	Cell Signalling technology #9901	1.4 μ M
U0126	Cell Signalling technology #9903	0.5 μ M
SP600125	Sigma-Aldrich #S5567	40 nM
Losartan potassium	Sigma-Aldrich #SML3269	20 nM
GF 109203 X	Cell Signalling technology #37969	20 nM
Rapamycin	Cambridge bioscience #r0161	1 nM
Calcitriol	Sigma-Aldrich #D1530	500 nM

Leukotriene D4	Cambridge bioscience #CAY20310	1 pM
17-β-estradiol	Sigma-Aldrich #E8875	10 nM
4-OHT	Sigma-Aldrich #H6278	10 μ M
D-AP5	Sigma-Aldrich #A8054	0.46 μ M
Kainic acid	Tocris #7065	7.4 μ M