

Table S1. Primer sequences for gene expression.

Gene	Gene Name	Accession	Direction	Sequence
<i>Ki67</i>	Ki67 antigen marker of proliferation	NM_001081117.2	Forward	5'-TGATGTTAGGTGTTTGAGGTCC-3'
			Reverse	5'-CACTTTTCTGGTAACTTCTTGTC-3'
<i>Ccnd1</i>	Cyclin D1 (v1)	NM_001379248.1	Forward	5'-AATGTACTCTGCTTTGCTGAA-3'
			Reverse	5'-AATGTACTCTGCTTTGCTGAA-3'
<i>Gdp1</i>	Glycerol-3-Phosphate Dehydrogenase 1	NM_010271.3	Forward	5'-AAGTCAAGGGCTGCCGTT-3'
			Reverse	5'-TCCCTTGGCAGCCTTTGC-3'
<i>Ldha1</i>	Lactate Dehydrogenase A Isoform 1 (v1)	NM_010699.2	Forward	5'-ACGCAGACAAGGAGCAGTGGAA-3'
			Reverse	5'-ATGCTCTCAGCCAAGTCTGCCA-3'
<i>Col2</i>	Collagen 2 α 1 (v2)	NM_001113515.3	Forward	5'-TGGCTTCCACTTCAGCTATG-3'
			Reverse	5'-AGGTAGGCGATGCTGTTCTT-3'
<i>Acan</i>	Aggrecan	L07049.1	Forward	5'-GACCAGGAAGGGAGGAGTAG-3'
			Reverse	5'-CAGCCGAGAAATGACACC-3'
<i>Col10</i>	Collagen 10 α 1	NM_009925.4	Forward	5'-ACGGCACGCCTACGATGT-3'
			Reverse	5'-CCATGATTGCACTCCCTG-3'
<i>Mmp13</i>	Matrix Metalloproteinase 13	NM_008607.2	Forward	5'-CATCCATCCCGTGACCTTAT-3'
			Reverse	5'-TCATAACCATTTCAGAGCCCA-3'
<i>Sox6</i>	SRY-Box Transcription Factor 6	BC067407.1	Forward	5'-CGGAGGAAGTCGGTGAAGA-3'
			Reverse	5'-GTCGGTTTTGGGAGTGGTG-3'
<i>Sox9</i>	SRY-Box Transcription Factor 9	NM_011448.4	Forward	5'-CGGAGGAAGTCGGTGAAGA-3'
			Reverse	5'-GTCGGTTTTGGGAGTGGTG-3'
<i>Alp</i>	Alkaline Phosphatase (v3)	NM_001429381.1	Forward	5'-ATGGTAACGGGCCTGGCTACA-3'
			Reverse	5'-AGTTCTGCTCATGGACGCCGT-3'
<i>Bsp</i>	Bone Sialoprotein	L20232.1	Forward	5'-AACGGGTTTCAGCAGACAACC-3'
			Reverse	5'-TAAGCTCGGTAAGTGTCGCCA-3'
<i>Bglap/Ocn</i>	Osteocalcin	NM_007541.3	Forward	5'-CTCTCTCTGCTCACTCTGCT-3'
			Reverse	5'-TTTGTAGGCGGTCTTCAAGC-3'
<i>Sp7</i>	Osterix	NM_001348205.1	Forward	5'-TCCTCTCTGCTTGAGGAAGAAG-3'
			Reverse	5'-GAGTCCATTGGTGCTTGAGAAG-3'
<i>Vegf</i>	Vascular Endothelial Growth Factor (v1)	NM_001025257.3	Forward	5'-ATATCAGGCTTTCTGGATTAAGGAC-3'
			Reverse	5'-ATATCAGGCTTTCTGGATTAAGGAC-3'
<i>Gli1</i>	GLI-Kruppel 1	NM_010296.2	Forward	5'-GCACCACATCAACAGTGAGC-3'
			Reverse	5'-GCGTCTTGAGGTTTTCAAGG-3'
<i>Ppia</i>	Peptidylprolyl Isomerase A	NM_008907.2	Forward	5'-CCATGGCAAATGCTGGACCA-3'
			Reverse	5'-TCCTGGACCCAAAACGCTCC-3'

Table S2. Antibody source and application.

<u>Antibody Specificity</u>	<u>Vendor</u>	<u>Catalog #</u>	<u>Dilution</u>	<u>Antigen Retrieval</u>
PTCH1	Novus Biologicals	nb200-118	1:50	UniTrieve Biological
HIF-1 α	Novus Biologicals	nb100-134	1:50	UniTrieve Biological