

Table S1. Table showing results from gene set enrichment analysis (GSEA).

Gene Set Name	# Genes in Gene set (K)	# Genes in Overlap (k)	k/K	p-value	FDR q-value
GO_CALCIUM_ION_BINDING	697	10	0.0143	4.38E-08	5.56E-05
HALLMARK_KRAS_SIGNALING_UP	200	6	0.03	3.83E-07	3.53E-04
GO_POSITIVE_REGULATION_OF_PATHWAY_ RESTRICTED_SMAD_PROTEIN_PHOSPHORYL ATION	48	4	0.0833	6.35E-07	3.54E-04
GO_TRANSFORMING_GROWTH_FACTOR_B ETA_RECEPTOR_BINDING	50	4	0.08	7.51E-07	3.81E-04
GO_SMAD_PROTEIN_SIGNAL_TRANSDUCTI ON	56	4	0.0714	1.19E-06	4.58E-04
GO_REGULATION_OF_PATHWAY_RESTRICTE D_SMAD_PROTEIN_PHOSPHORYLATION	60	4	0.0667	1.57E-06	5.45E-04
GO_REGULATION_OF_CELL_DIFFERENTIATI ON	1492	10	0.0067	4.40E-07	8.38E-04

Gene set (K) means the total number of genes. Genes in overlap (k) means how many genes in the gene set that is also present in samples. False discovery rate (FDR) q-value represents rate of false positives in data.

Table S2. Table of information for elastic modulus.

	Sample Group Name
	G1H0.3
Total solid (g/ml)	1.3
Gelatin Type A (g/ml)	1
Heparin (g/ml)	0.3
Elastic modulus (Pa)	536±0.05177

Exact amount of gelatin, heparin and elastic modulus is shown.

Table S3. Table of primers used for PCR analysis.

Target	Primer	Sequence
<i>OCT-4</i>	Forward	CGTGAAGCTGGAGGAGA
	Reverse	CATCGGCCTGTGTATATCCC
<i>BMPRII</i>	Forward	GCTAAAATTTGGCAGCAAGC
	Reverse	CTTGGGCCCTATGTGTCACT
<i>BMPRIA</i>	Forward	CAGGTTCTGGACTCAGCTC
	Reverse	CTTTCCTGGGTGCCATAAA
<i>SLUG</i>	Forward	GCACTGCGATGCCAGTCTA
	Reverse	TGGCGCAGATCTTGCAAACA
<i>SNAIL</i>	Forward	GGCAATTTAACAATGTCTGAAAAGG
	Reverse	GAATAGTTCTGGGAGACACATCG
<i>VEGFR-2</i>	Forward	GGACTTCCAGGGAGGAAATAAA
	Reverse	CGCTTGGATAACAAGGGTACT
<i>CD31</i>	Forward	AAATGCTCTCCAGCCAGCAT
	Reverse	GCAACACACTGGTATTTCGACGTCTT
<i>VCAM1</i>	Forward	GATTGGTGACTCCGTCTCATT
	Reverse	CCTTCCCATTTCAGTCGACTATC
<i>CBFA1</i>	Forward	TGAGCTCCGGAATGCCTCTG
	Reverse	TGTCTGTGCCTTCTGGGTCC
<i>ALP</i>	Forward	GCTGGTGGAAGGAGGCAGAA
	Reverse	GTGGGAATGGTCCGCAGTGA
<i>COL I</i>	Forward	GTCACCCACCGACCAAGAAACC
	Reverse	AAGTCCAGGCTGTCCAGGGATG

Primer sequences used in PCR experiments are listed.