

Table S1: List of primers used for real-time polymerase chain reaction.

Gene Name	Primer Sequence	GenBank No.
GAPDH	F: 5' CGCTCTCTGCTCCTCCTGTT 3'	NM_002046.3
	R: 5' CCATGGTGTCTGAGCGATGT 3'	
Aggrecan (Agg)	F: 5' TGAGGAGGGCTGGAACAAGTACC 3'	NM_001135.3
	R: 5' GGAGGTGGTAATTGCAGGGAACA 3'	
COL2A1 (COL2)	F: 5' TCACGTACACTGCCCTGAAG 3'	NM_001844.4
	R: 5' TTGCAACGGATTGTGTTGTT 3'	
COL1A2 (COL1)	F: 5' AGGGCAACAGCAGGTTCACTTACA 3'	NM_000089.3
	R: 5' AGCGGGGGAAGGAGTTAATGAAAC 3'	
COL10A1 (COLX)	F: 5' CCCTTTTGTGCTGCTAGTATCC 3'	NM_000493.3
	R: 5' CTGTTGTCCAGGTTTTCTGGCAC 3'	
MMP-3	F: 5' AGAGGTGACTCCACTCACAT 3'	NM_002422.3
	R: 5' GGTCTGTGAGTGAGTGATAG 3'	
MMP-13	F: 5' TTGAGCTGGACTCATTGTCG 3'	NM_002427.3
	R: 5' GGAGCCTCTCAGTCATGGAG 3'	
ADAMTS-5	F: 5' AAATTCTGTGAAGAGACCTTTGGT 3'	NM_007038.3
	R: 5' GCTGGTAAGGATGGAAGACATTAA 3'	

Table S2. Interaction index for gene expression in conditioned medium (CM) and bi-layered (Bi) co-culture.

Gene expression Cells/TGF-β3 /Culture	Agg Avg +/- Stdev	COL2 Avg +/- Stdev	COL1 Avg +/- Stdev	COLX Avg +/- Stdev
C/ - / CM	0.82 +/- 0.13	0.95 +/- 0.02	0.58 +/- 0.17	0.89 +/- 0.33
A/ - / CM	0.55 +/- 0.32	1.44 +/- 0.28	1.19 +/- 0.12	0.43 +/- 0.01
C/ + / CM	0.59 +/- 0.06	0.59 +/- 0.17	0.54 +/- 0.18	0.39 +/- 0.26
A/ + / CM	0.42 +/- 0.08	0.30 +/- 0.10	0.76 +/- 0.18	0.48 +/- 0.13
C+A / - / Bi	1.24 +/- 0.28	1.13 +/- 0.12	0.58 +/- 0.11	2.03 +/- 1.10
C+A / + / Bi	0.79 +/- 0.12	0.02 +/- 0.004	0.24 +/- 0.02	0.03 +/- 0.005

Table S3. Interaction index for biochemical content in conditioned medium (CM) and bi-layered (Bi) co-culture.

Biochemical Content Cells/TGF-β3 /Culture	DNA/w.w. Avg +/- Stdev	GAG/w.w. Avg +/- Stdev	Collagen/w.w. Avg +/- Stdev
C/ - / CM	0.91 +/- 0.02	0.85 +/- 0.13	0.78 +/- 0.15
A/ - / CM	1.01 +/- 0.12	0.91 +/- 0.12	1.33 +/- 0.30
C/ + / CM	1.02 +/- 0.08	0.88 +/- 0.15	1.85 +/- 0.28
A/ + / CM	0.81 +/- 0.12	0.70 +/- 0.09	0.46 +/- 0.15
C+A / - / Bi	0.83 +/- 0.05	0.73 +/- 0.09	1.25 +/- 0.28
C+A / - / Bi	0.90 +/- 0.09	0.48 +/- 0.13	0.34 +/- 0.11

Table S4. Interaction index for gene expression in mixed co-culture.

Gene Expression	Agg Avg +/- Stdev	COL2 Avg +/- Stdev	COL1 Avg +/- Stdev	COLX Avg +/- Stdev
without TGF-β3				
50C:50A	2.46 +/- 0.18	0.75 +/- 0.04	1.02 +/- 0.07	1.20 +/- 0.47
25C:75A	5.95 +/- 0.08	1.01 +/- 0.18	0.86 +/- 0.13	1.34 +/- 0.51
10C:90A	13.83 +/- 1.80	2.56 +/- 0.52	1.10 +/- 0.07	1.24 +/- 0.18
with TGF-β3				
50C:50A	1.16 +/- 0.20	0.72 +/- 0.14	1.32 +/- 0.04	0.57 +/- 0.20
25C:75A	1.38 +/- 0.20	0.65 +/- 0.04	0.77 +/- 0.06	0.45 +/- 0.21
10C:90A	1.29 +/- 0.19	0.66 +/- 0.10	0.77 +/- 0.02	0.31 +/- 0.11

Table S5. Interaction index for biochemical content in mixed co-culture.

Biochemical Content	DNA/w.w. Avg +/- Stdev	GAG/w.w. Avg +/- Stdev	Collagen/w.w. Avg +/- Stdev
without TGF-β3			
50C:50A	0.80 +/- 0.02	1.49 +/- 0.23	1.22 +/- 0.19
25C:75A	0.91 +/- 0.07	1.58 +/- 0.06	1.29 +/- 0.17
10C:90A	1.00 +/- 0.05	1.33 +/- 0.22	1.30 +/- 0.19
With TGF-β3			
50C:50A	1.03 +/- 0.07	1.99 +/- 0.16	1.52 +/- 0.53
25C:75A	1.25 +/- 0.14	2.60 +/- 0.39	2.17 +/- 0.29
10C:90A	0.76 +/- 0.02	1.01 +/- 0.14	0.25 +/- 0.03