

**Supplementary Table 3:** Gene Expression of Extracellular Matrix (ECM) and Cell Adhesion Molecules (All Data)

Gene Id	Description	Fold Change	95% CI	P-Value
Adamts1	A disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 1	1.3314	( 1.01, 1.65 )	0.078127
Adamts2	A disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 2	0.8025	( 0.75, 0.86 )	0.000789
Adamts5	A disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 5 (aggrecanase-2)	1.3287	( 0.46, 2.20 )	0.375742
Adamts8	A disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 8	0.9658	( 0.00001, 2.27 )	0.484741
Cd44	CD44 antigen	1.3263	( 0.63, 2.03 )	0.316184
<b>*Cdh1</b>	<b>Cadherin 1</b>	<b>0.4853</b>	<b>( 0.37, 0.60 )</b>	<b>0.00039</b>
Cdh2	Cadherin 2	0.9672	( 0.66, 1.28 )	0.780854
Cdh3	Cadherin 3	0.4226	( 0.05, 0.79 )	0.146559
Cdh4	Cadherin 4	1.0171	( 0.35, 1.68 )	0.864785
Cntn1	Contactin 1	1.1167	( 0.00001, 2.70 )	0.487153
Col1a1	Collagen, type I, alpha 1	3.1802	( 0.76, 5.61 )	0.05288
Col2a1	Collagen, type II, alpha 1	3.8509	( 0.00001, 13.90 )	0.195432
Col3a1	Collagen, type III, alpha 1	1.7215	( 1.18, 2.26 )	0.025846
Col4a1	Collagen, type IV, alpha 1	1.7688	( 1.23, 2.30 )	0.014611
<b>*Col4a2</b>	<b>Collagen, type IV, alpha 2</b>	<b>2.3052</b>	<b>( 1.52, 3.09 )</b>	<b>0.00733</b>
Col4a3	Collagen, type IV, alpha 3	1.4253	( 0.62, 2.23 )	0.22452
Col5a1	Collagen, type V, alpha 1	1.6345	( 1.14, 2.13 )	0.014246
Col6a1	Collagen, type VI, alpha 1	1.152	( 0.29, 2.01 )	0.851439
Ctgf	Connective tissue growth factor	1.2056	( 0.72, 1.69 )	0.382354
Ctnna1	Catenin (cadherin associated protein), alpha 1	0.8137	( 0.73, 0.90 )	0.009532
Ctnna2	Catenin (cadherin associated protein), alpha 2	1.0842	( 0.18, 1.99 )	0.822368
Ctnnb1	Catenin (cadherin associated protein), beta 1	0.7936	( 0.64, 0.95 )	0.060991
Ecm1	Extracellular matrix protein 1	1.6714	( 1.43, 1.92 )	0.000658
Emilin1	Elastin microfibril interfacier 1	1.2637	( 0.61, 1.91 )	0.675869
<b>*Entpd1</b>	<b>Ectonucleoside triphosphate diphosphohydrolase 1</b>	<b>0.4822</b>	<b>( 0.34, 0.63 )</b>	<b>0.002935</b>
Fbln1	Fibulin 1	0.866	( 0.73, 1.00 )	0.111354
<b>*Fn1</b>	<b>Fibronectin 1</b>	<b>3.2415</b>	<b>( 2.48, 4.01 )</b>	<b>0.000005</b>
Hapln1	Hyaluronan and proteoglycan link protein 1	0.5151	( 0.15, 0.88 )	0.122023
Hc	Hemolytic complement	0.5106	( 0.00001, 2.26 )	0.674741
Icam1	Intercellular adhesion molecule 1	1.0144	( 0.85, 1.18 )	0.89718
<b>*Itga2</b>	<b>Integrin alpha 2</b>	<b>0.3455</b>	<b>( 0.24, 0.45 )</b>	<b>0.002473</b>
Itga3	Integrin alpha 3	1.4944	( 1.26, 1.73 )	0.002257
Itga4	Integrin alpha 4	6.9667	( 0.00001, 25.77 )	0.104377
Itga5	Integrin alpha 5 (fibronectin receptor alpha)	0.8197	( 0.73, 0.91 )	0.012424
Itgae	Integrin alpha E, epithelial-associated	1.104	( 0.25, 1.96 )	0.613172
Itgal	Integrin alpha L	18.7969	( 0.00001, 67.56 )	0.159671

Itgam	Integrin alpha M	14.8365	( 0.00001, 42.17 )	0.087003
Itgav	Integrin alpha V	0.7158	( 0.62, 0.81 )	0.004135
Itgax	Integrin alpha X	1.6158	( 0.00001, 3.99 )	0.382954
Itgb1	Integrin beta 1 (fibronectin receptor beta)	0.831	( 0.58, 1.09 )	0.283103
Itgb2	Integrin beta 2	0.9507	( 0.54, 1.36 )	0.974854
Itgb3	Integrin beta 3	1.0448	( 0.77, 1.32 )	0.650141
Itgb4	Integrin beta 4	1.3585	( 0.89, 1.83 )	0.129847
Lama1	Laminin, alpha 1	1.0273	( 0.90, 1.15 )	0.659334
Lama2	Laminin, alpha 2	1.3132	( 0.92, 1.70 )	0.123546
Lama3	Laminin, alpha 3	0.5483	( 0.12, 0.98 )	0.23183
Lamb2	Laminin, beta 2	1.1747	( 1.04, 1.31 )	0.032743
Lamb3	Laminin, beta 3	1.2991	( 0.00001, 5.60 )	0.287687
Lamc1	Laminin, gamma 1	1.3738	( 1.11, 1.64 )	0.013673
<b>*Mmp10</b>	<b>Matrix metalloproteinase 10</b>	<b>3.9831</b>	<b>( 0.00001, 9.30 )</b>	<b>0.043207</b>
Mmp11	Matrix metalloproteinase 11	1.2755	( 1.04, 1.51 )	0.041379
<b>*Mmp12</b>	<b>Matrix metalloproteinase 12</b>	<b>9.1316</b>	<b>( 0.00001, 29.91 )</b>	<b>0.005753</b>
Mmp13	Matrix metalloproteinase 13	1.7152	( 0.00001, 8.60 )	0.59266
Mmp14	Matrix metalloproteinase 14 (membrane-inserted)	1.2309	( 0.81, 1.66 )	0.274402
Mmp15	Matrix metalloproteinase 15	0.7902	( 0.61, 0.97 )	0.094607
Mmp1a	Matrix metalloproteinase 1a (interstitial collagenase)	0.3431	( 0.09, 0.60 )	0.155278
Mmp2	Matrix metalloproteinase 2	1.7237	( 0.68, 2.77 )	0.113119
Mmp3	Matrix metalloproteinase 3	0.2371	( 0.00001, 1.15 )	0.233726
Mmp7	Matrix metalloproteinase 7	1.3975	( 0.00001, 4.10 )	0.609798
Mmp8	Matrix metalloproteinase 8	1.0075	( 0.00001, 2.04 )	0.598212
Mmp9	Matrix metalloproteinase 9	5.4801	( 0.00001, 14.01 )	0.080729
Ncam1	Neural cell adhesion molecule 1	1.0348	( 0.69, 1.38 )	0.687284
Ncam2	Neural cell adhesion molecule 2	0.1574	( 0.00001, 0.69 )	0.510377
Pecam1	Platelet/endothelial cell adhesion molecule 1	0.7129	( 0.52, 0.91 )	0.053912
Postn	Periostin, osteoblast specific factor	0.7587	( 0.20, 1.32 )	0.900194
Sele	Selectin, endothelial cell	1.0111	( 0.35, 1.67 )	0.919159
Sell	Selectin, lymphocyte	0.2302	( 0.00001, 0.86 )	0.349432
Selp	Selectin, platelet	0.6239	( 0.33, 0.92 )	0.127502
Sgce	Sarcoglycan, epsilon	0.8957	( 0.41, 1.38 )	0.670762
Sparc	Secreted acidic cysteine rich glycoprotein	1.1183	( 0.90, 1.33 )	0.278855
Spock1	Sparc/osteonectin, cwcv and kazal-like domains proteoglycan 1	0.6686	( 0.18, 1.15 )	0.376396
Spp1	Secreted phosphoprotein 1	1.0942	( 0.02, 2.17 )	0.511897
Syt1	Synaptotagmin I	4.9617	( 0.00001, 15.09 )	0.154091
Tgfb1	Transforming growth factor, beta induced	1.3228	( 0.88, 1.77 )	0.178037
Thbs1	Thrombospondin 1	0.8531	( 0.75, 0.96 )	0.040002
Thbs2	Thrombospondin 2	3.2806	( 0.06, 6.50 )	0.051335
Thbs3	Thrombospondin 3	1.5986	( 0.78, 2.41 )	0.099082
Timp1	Tissue inhibitor of metalloproteinase 1	1.0509	( 0.88, 1.22 )	0.493715
Timp2	Tissue inhibitor of metalloproteinase 2	1.581	( 0.52, 2.65 )	0.219348
Timp3	Tissue inhibitor of metalloproteinase 3	1.6668	( 1.29, 2.04 )	0.004066
Tnc	Tenascin C	2.1979	( 0.72, 3.68 )	0.078169
Vcam1	Vascular cell adhesion molecule 1	1.2305	( 1.11, 1.35 )	0.006313
Vcan	Versican	0.9677	( 0.84, 1.09 )	0.619731
Vtn	Vitronectin	0.918	( 0.17, 1.67 )	0.919721
Actb	Actin, beta	0.9382	( 0.87, 1.00 )	0.124592
B2m	Beta-2 microglobulin	1.5399	( 1.34, 1.74 )	0.000434

Gapdh	Glyceraldehyde-3-phosphate dehydrogenase	0.7839	( 0.67, 0.90 )	0.018572
Gusb	Glucuronidase, beta	0.8598	( 0.76, 0.96 )	0.059303
Hsp90ab1	Heat shock protein 90 alpha (cytosolic), class B member 1	0.7967	( 0.73, 0.87 )	0.002076
MGDC	Mouse Genomic DNA Contamination	1.0706	( 0.00001, 2.20 )	0.632672
RTC	Reverse Transcription Control	1.0655	( 0.00001, 2.32 )	0.593124
RTC	Reverse Transcription Control	0.9417	( 0.00001, 1.99 )	0.544155
RTC	Reverse Transcription Control	1.0093	( 0.00001, 2.11 )	0.564558
PPC	Positive PCR Control	1.1053	( 0.00001, 2.27 )	0.674324
PPC	Positive PCR Control	1.1279	( 0.00001, 2.42 )	0.667349
PPC	Positive PCR Control	1.1138	( 0.00001, 2.34 )	0.665537

\* = fold change greater than 2 (or less than 0.5) and statistically significant (p<0.05)

CI = confidence interval