

ECM-related genes demonstrating significant expression changes in the obese WAT compared to lean controls; bold rows indicates genes showing similar expression patterns in preadipocytes cultured with activated macrophages medium (AcMC). An extended version of this table, indicating significant expression changes of ECM-related genes in the three analyzed situations, is provided as online supplementary data on the companion web site associated to the manuscript.

ECM component	Gene ID	Symbol	Name	Obese/lean		AcMC		Tissular fraction	ECM role
				Fold	q-value (%)	Fold	q-value (%)		
<b>Structural proteins</b>									
	<a href="#">1303</a>	COL12A1	collagen, type XII, alpha 1	2.24	1.54	0.67	0.70	—	proper matrix
	<a href="#">1290</a>	<b>COL5A2</b>	<b>collagen, type V, alpha 2</b>	<b>1.79</b>	<b>1.67</b>	<b>1.64</b>	<b>0.26</b>	<b>SVF</b>	<b>proper matrix</b>
	<a href="#">1282</a>	COL4A1	collagen, type IV, alpha 1	1.77	0.39	0.61	0.37	SVF	proper matrix
	<a href="#">1277</a>	<b>COL1A1</b>	<b>collagen, type I, alpha 1</b>	<b>0.64</b>	<b>4.72</b>	<b>0.89</b>	<b>4.77</b>	<b>SVF</b>	<b>proper matrix</b>
<b>Glycoproteins</b>									
	<a href="#">3685</a>	<b>ITGAV</b>	<b>integrin, alpha V (vitronectin receptor, alpha polypeptide, antigen CD51)</b>	<b>2.01</b>	<b>2.44</b>	<b>1.25</b>	<b>3.24</b>	<b>Adipocyte</b>	<b>cell matrix adhesion</b>
	<a href="#">3688</a>	ITGB1	integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)	1.96	0.82	—	—	Adipocyte	cell matrix adhesion
	<a href="#">50856</a>	CLEC4A	C-type lectin domain family 4, member A	1.81	3.07	—	—	SVF	cell cell adhesion
	<a href="#">3684</a>	<b>ITGAM</b>	<b>integrin, alpha M (complement component 3 receptor 3 subunit)</b>	<b>1.61</b>	<b>1.00</b>	<b>2.85</b>	<b>0.00</b>	<b>SVF</b>	<b>cell matrix adhesion</b>

<a href="#">3689</a>	<b>ITGB2</b>	<b>integrin, beta 2 (complement component 3 receptor 3 and 4 subunit)</b>	<b>1.52</b>	<b>3.65</b>	<b>1.19</b>	<b>3.94</b>	<b>SVF</b>	<b>cell matrix adhesion</b>
<a href="#">3693</a>	ITGB5	integrin, beta 5	1.48	3.65	—	—	—	cell matrix adhesion
<a href="#">3912</a>	<b>LAMB1</b>	<b>laminin, beta 1</b>	<b>1.46</b>	<b>4.72</b>	<b>1.59</b>	<b>0.37</b>	—	<b>cell matrix adhesion</b>
<a href="#">8506</a>	CNTNAP1	contactin associated protein 1	1.26	4.72	0.32	0.00	SVF	cell matrix adhesion
<a href="#">7148</a>	TNXB	tenascin XB	0.78	1.54	—	—	SVF	cell matrix adhesion
<a href="#">3959</a>	LGALS3BP	lectin, galactoside-binding, soluble, 3 binding protein	0.68	2.44	8.00	0.00	Adipocyte	cell cell adhesion
<a href="#">3956</a>	LGALS1	lectin, galactoside-binding, soluble, 1 (galectin 1)	0.64	2.44	3.95	0.00	—	cell matrix adhesion
<a href="#">563</a>	AZGP1	alpha-2-glycoprotein 1, zinc	0.53	0.00	—	—	Adipocyte	cell matrix adhesion

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#### Glycosaminoglycans and proteoglycans

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<a href="#">6386</a>	SDCBP	syndecan binding protein (syntenin)	2.48	0.28	0.55	0.01	—	cell cell adhesion
<a href="#">4060</a>	<b>LUM</b>	<b>lumican</b>	<b>1.67</b>	<b>2.44</b>	<b>2.86</b>	<b>0.00</b>	<b>SVF</b>	<b>proper matrix</b>

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#### Enzymes

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<a href="#">7980</a>	<b>TFPI2</b>	<b>tissue factor pathway inhibitor 2</b>	<b>1.74</b>	<b>0.00</b>	<b>7.06</b>	<b>0.00</b>	<b>SVF</b>	<b>remodeling</b>
<a href="#">6184</a>	<b>RPN1</b>	<b>ribophorin I</b>	<b>1.61</b>	<b>0.00</b>	<b>1.88</b>	<b>0.00</b>	—	<b>remodeling</b>
<a href="#">8038</a>	<b>ADAM12</b>	<b>ADAM metallopeptidase domain 12 (meltrin</b>	<b>1.61</b>	<b>0.00</b>	<b>1.14</b>	<b>3.94</b>	<b>Adipocyte</b>	<b>remodeling</b>

		<b>alpha)</b>							
4015	LOX	lysyl oxidase	1.53	3.07	—	—	SVF	remodeling	
1520	CTSS	<b>cathepsin S</b>	<b>1.49</b>	<b>3.07</b>	<b>1.80</b>	<b>0.04</b>	<b>SVF</b>	<b>remodeling</b>	
8974	P4HA2	<b>procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha polypeptide II</b>	<b>1.47</b>	<b>0.00</b>	<b>5.42</b>	<b>0.00</b>	—	<b>remodeling</b>	
22856	CHSY1	carbohydrate (chondroitin) synthase 1	1.44	3.65	—	—	—	remodeling	
115209	OMA1	OMA1 homolog, zinc metallopeptidase ( <i>S. cerevisiae</i> )	1.42	0.28	0.27	0.00	—	remodeling	
8754	ADAM9	<b>ADAM metallopeptidase domain 9 (meltrin gamma)</b>	<b>1.41</b>	<b>1.00</b>	<b>1.42</b>	<b>0.50</b>	<b>SVF</b>	<b>remodeling</b>	
55454	GALNACT	chondroitin sulfate GalNAcT-2	1.40	1.29	—	—	SVF	remodeling	
6868	ADAM17	ADAM metallopeptidase domain 17 (tumor necrosis factor, alpha, converting enzyme)	0.79	2.44	1.48	3.94	SVF	remodeling	
10402	ST3GAL6	ST3 beta-galactoside alpha-2,3-sialyltransferase 6	0.77	3.65	—	—	—	remodeling	
30815	ST6GALN	ST6 (alpha-N-acetylneuraminyl-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 6	0.76	3.07	—	—	—	remodeling	
5351	PLOD1	procollagen-lysine 1, 2-oxoglutarate 5-	0.76	3.07	3.49	0.00	Adipocyte	remodeling	

8751	ADAM15	dioxygenase 1 ADAM metallopeptidase domain 15 (metargidin)	0.71	0.82	2.34	0.02	SVF	remodeling
1368	CPM	carboxypeptidase M	0.63	1.00	2.63	0.00	Adipocyte	remodeling
<b>Other components</b>								
131566	DCBLD2	<b>discoidin, CUB and LCCL domain containing 2</b>	<b>1.87</b>	<b>1.00</b>	<b>1.50</b>	<b>0.11</b>	—	<b>cell matrix adhesion</b>
11082	ESM1	<b>endothelial cell- specific molecule 1 membrane</b>	<b>1.38</b>	<b>0.28</b>	<b>2.50</b>	<b>0.01</b>	—	<b>proper matrix</b>
9223	MAGI1	<b>associated guanylate kinase, WW and PDZ domain containing 1</b>	<b>0.76</b>	<b>1.67</b>	<b>0.55</b>	<b>0.00</b>	<b>Adipocyte</b>	<b>cell matrix adhesion</b>
8189	SYMPK	<b>symplekin</b>	<b>0.76</b>	<b>3.07</b>	<b>0.40</b>	<b>0.00</b>	<b>Adipocyte</b>	<b>cell cell adhesion</b>
57165	GJA12	<b>gap junction protein, alpha 12, 47kDa</b>	<b>0.75</b>	<b>1.00</b>	<b>0.44</b>	<b>0.00</b>	<b>SVF</b>	<b>cell cell adhesion</b>
2701	GJA4	gap junction protein, alpha 4, 37kDa (connexin 37)	0.74	1.00	—	—	SVF	cell cell adhesion
5549	PRELP	proline/arginine-rich end leucine-rich repeat protein	0.73	3.07	—	—	Adipocyte	cell matrix adhesion
2152	F3	coagulation factor III (thromboplastin, tissue factor)	0.72	1.54	3.51	0.00	—	remodeling

SVF = Stroma Vascular Fraction

The indicated fold variations were measured in the cDNA microarray experiments. Differential expression q-values were computed with the SAM algorithm and are expressed in percentages (%) indicating the global FDR expected in relation with each of the selected genes.