

Supplementary Table 1. mRNA transcripts evaluated by qPCR. The expression of each gene was normalized to β -actin, and then further normalized to the vehicle treated control group using the $2^{-\Delta\Delta Ct}$ approach. P values for the unpaired t-test comparing muscles from simvastatin treated animals to vehicle treated animals are provided (N=8 supraspinatus muscles from each group).

Gene	P Value	RefSeq	Name
Acat1	0.04	NM_017075	Acetyl-coenzyme A acetyltransferase 1
Actb	--	NM_031144	Actin, beta
Agpat6	0.22	NM_001047849	1-acylglycerol-3-phosphate O-acyltransferase 6, GPAT4
Alox5	0.19	NM_012822	5-LOX, Arachidonate 5-lipoxygenase
Apoe	0.06	NM_138828	Apolipoprotein E
Atg16l1	0.47	NM_001108809	ATG16 autophagy related 16-like 1 (<i>S. cerevisiae</i>)
Atg5	0.40	NM_001014250	ATG5 autophagy related 5 homolog (<i>S. cerevisiae</i>)
Atgl	0.04	NM_001108509	Adipose Triglyceride Lipase
Becn1	0.14	NM_053739	Beclin 1, autophagy related
Cd11b	0.08	NM_012711	Integrin, alpha M
Cd68	0.04	NM_001031638	Cd68 molecule
Cebpa	0.01	NM_012524	CCAAT/enhancer binding protein (C/EBP), alpha
Cgi58	0.12	NM_212524	Abhydrolase domain containing 5
Colla2	0.01	NM_053356	Collagen, type I, alpha 2
Cox1	0.12	NM_017043	Prostaglandin-endoperoxide synthase 1
Cox2	0.12	NM_017232	Prostaglandin-endoperoxide synthase 2
Dgat1	0.50	NM_053437	Diacylglycerol O-acyltransferase homolog 1 (mouse)
Emr1	0.27	NM_001007557	EGF-like module containing, F4/80
Fat/Cd36	0.05	XM_575338	Similar to fatty acid translocase/CD36
Fbxo32	0.20	NM_133521	Atrogin-1
Fitm1	0.11	NM_001106037	Fat storage-inducing transmembrane protein 1
Fitm2	0.37	NM_001107799	Fat storage-inducing transmembrane protein 2
Fsp1	0.10	NM_012618	S100 calcium-binding protein A4
Fsp27	0.08	NM_001024333	Cell death-inducing DFFA-like effector c, CIDEC
Cd168	0.17	NM_012964	Hyaluronan mediated motility receptor (RHAMM)
Il10	0.23	NM_012854	Interleukin 10
Il1b	0.03	NM_031512	Interleukin 1 beta
Il6	0.47	NM_012589	Interleukin 6
Mmp2	0.01	NM_031054	Matrix metalloproteinase 2
Mmp3	0.11	NM_133523	Matrix metalloproteinase 3
Mmp8	0.18	NM_022221	Matrix metalloproteinase 8
Mmp9	0.22	NM_031055	Matrix metalloproteinase 9
Mmp13	0.18	NM_133530	Matrix metalloproteinase 13
Mmp14	0.01	NM_031056	Matrix metalloproteinase 14 (membrane-inserted)
eMHC	0.03	NM_012604	Myosin, heavy chain 3, skeletal muscle, embryonic
Pdgfra	0.04	NM_012802	Platelet derived growth factor receptor, alpha
Pld1	0.07	NM_030992	Phospholipase D1
Plin1	0.05	NM_013094	Perilipin 1
Plin5	0.42	NM_001134637	Perilipin 5
Pparg	0.03	NM_013124	Peroxisome proliferator-activated receptor gamma
Scx	0.11	NM_001130508	Scleraxis
Timp1	0.01	NM_053819	TIMP metalloproteinase inhibitor 1
Timp2	0.02	NM_021989	TIMP metalloproteinase inhibitor 2
Tnmd	0.02	NM_022290	Tenomodulin
Trim63	0.27	NM_080903	MuRF-1, Tripartite motif-containing 63
Vps34	0.11	NM_022958	Phosphoinositide-3-kinase, class 3