

MUSCLE GO Terms						
Atg7 <sup>fllox/fllox</sup> ;Fed/Atg <sup>Δ/Δ</sup> ;Fed Comparison	Atg <sup>Δ/Δ</sup> ;Fed Upregulated Genes	Atg <sup>Δ/Δ</sup> ;Fed Upregulated Genes	Atg <sup>Δ/Δ</sup> ;Fed Downregulated Genes	Atg <sup>Δ/Δ</sup> ;Fed Downregulated Genes	p-value	Bonferroni
GO:0060537 muscle tissue development	3	TIPARP, FOXP1, CSRP3	-9	MEF2C, TNNT2, RXRG, MYOG, PAK1, RARB, CHRNA1, TPM1, TGFB2	3.03E-06	0.00445
GO:0014706 striated muscle tissue development	2	FOXP1, CSRP3	-9	MEF2C, TNNT2, RXRG, MYOG, PAK1, RARB, CHRNA1, TPM1, TGFB2	1.09E-05	0.015959
Atg7 <sup>Δ/Δ</sup> ;Fed/Atg <sup>Δ/Δ</sup> ;Fasted Comparison	Atg <sup>Δ/Δ</sup> ;Fasted Upregulated Genes	Atg <sup>Δ/Δ</sup> ;Fasted Upregulated Genes	Atg <sup>Δ/Δ</sup> ;Fasted Downregulated Genes	Atg <sup>Δ/Δ</sup> ;Fasted Downregulated Genes	p-value	Bonferroni
GO:0009611 response to wounding	52	CXCL13, MBL2, ORM1, FGB, PLG, CFI, F2, KNG1, FGG, SAA2, FGA, CRP, HC, ARG1, C4BP, SERPINA3N, F9, C8A, AHSG, APOH, ORM2, SERPINA1A, SAA1, SAA4, F13B, SERPINC1, F5, SERPINA1B, C9, CXCL1, SERPINF2, PROC, F12, KLKB1, SLC7A2, MBL1, SERPIND1, ORM3, SAA3, C8B, CD14, F7, MST1, C8G, C2, CXCL10, PPARA, F10, CXCL2, CHI3L3, C3, KLF6	-4	CCL21A, CCL8, PF4, EFEMP2	1.70E-20	3.73E-17
GO:0002526 acute inflammatory response	26	MBL1, MBL2, C9, C3, CRP, AHSG, SERPINA1B, SAA2, SAA1, SERPINA1A, C2, CFI, HC, SAA3, SAA4, C8G, C8A, ORM1, C8B, SERPINA3N, C4BP, SLC7A2, SERPINF2, F2, ORM2, ORM3	0		5.78E-17	2.43E-13
GO:0055114 oxidation reduction	65	EGLN3, UOX, MOSC1, CYP2E1, HGD, HPD, CYP2D26, CYP2C68, CYP2C70, CYP3A25, PAH, TDO2, RDH7, CYP7B1, CYP2D10, AASS, CYP3A13, CYP2B10, CYP8B1, H6PD, CYP2C29, CYP1A2, CYP2C37, F5, CYP2C50, CYP17A1, CYP2A4, BC089597, CYP3A11, CYP2A12, CYP2F2, CDO1, HSD17B2, DPYD, ALDH8A1, CYP4A10, CYP2C54, KMO, DMGDH, IYD, CYP26A1, CYP2C44, EHHADH, PIPOX, ACOX2, CYP2D22, CP, SC4MOL, POR, HAO1, AKR1C13, FMO2, NOX4, ALDH1L1, ENOX2, SLC25A13, CYP2D9, RDH9, HSD11B1, CYP51, PRODH, PRODH2, SRXN1, CYP4V3, CYP27A1	-5	SMOX, LOXL1, AOC3, CBR2, GPD2	5.99E-15	1.31E-11
GO:0006954 inflammatory response	34	CXCL13, MBL2, ORM1, CFI, F2, KNG1, SAA2, CRP, HC, C4BP, SERPINA3N, C8A, AHSG, ORM2, SERPINA1A, SAA1, SAA4, SERPINA1B, C9, CXCL1, SERPINF2, KLKB1, SLC7A2, MBL1, ORM3, SAA3, C8B, CD14, C8G, C2, CXCL10, CXCL2, CHI3L3, C3	-2	CCL8, CCL21A	4.05E-13	8.87E-10
GO:0007596 blood coagulation	19	FGB, PLG, F2, KNG1, FGG, FGA, F9, APOH, F13B, SERPINC1, F5, C9, PROC, F12, KLKB1, SERPIND1, F7, MST1, F10	-2	EFEMP2, PF4	4.33E-13	9.47E-10
GO:0050817 coagulation	19	FGB, PLG, F2, KNG1, FGG, FGA, F9, APOH, F13B, SERPINC1, F5, C9, PROC, F12, KLKB1, SERPIND1, F7, MST1, F10	-2	EFEMP2, PF4	4.33E-13	9.47E-10
GO:0007599 hemostasis	19	FGB, PLG, F2, KNG1, FGG, FGA, F9, APOH, F13B, SERPINC1, F5, C9, PROC, F12, KLKB1, SERPIND1, F7, MST1, F10	-2	EFEMP2, PF4	5.82E-13	1.27E-09
GO:0006953 acute-phase response	14	CRP, SAA3, SAA4, AHSG, ORM1, SERPINA3N, SERPINA1B, SAA2, SERPINA1A, SERPINF2, SAA1, F2, ORM2, ORM3	0		1.35E-11	2.94E-08
GO:0050878~ regulation of body fluid levels	19	FGB, PLG, F2, KNG1, FGG, FGA, F9, APOH, F13B, SERPINC1, F5, C9, PROC, F12, KLKB1, SERPIND1, F7, MST1, F10	-2	EFEMP2, PF4	5.53E-11	1.21E-07
GO:0042060 wound healing	21	FGB, PLG, F2, KNG1, FGG, FGA, F9, APOH, F13B, SERPINC1, F5, C9, PROC, F12, KLKB1, SERPIND1, F7, MST1, PPARA, F10, KLF6	-2	EFEMP2, PF4	1.00E-10	2.19E-07
GO:0009063 cellular amino acid catabolic process	16	AHCY, HAL, FTCD, HGD, AASS, PAH, CDO1, TAT, FAH, AMDHD1, TDO2, PRODH2, DMGDH, UROC1, PRODH, HPD	0		5.91E-10	1.29E-06
GO:0016054 organic acid catabolic process	19	ACOX2, AHCY, EHHADH, HAL, FTCD, HGD, AASS, PAH, CDO1, TAT, FAH, AMDHD1, TDO2, PRODH2, DMGDH, UROC1, SLC27A2, HPD, PRODH	0		6.21E-10	1.36E-06
GO:0046395 carboxylic acid catabolic process	19	ACOX2, AHCY, EHHADH, HAL, FTCD, HGD, AASS, PAH, CDO1, TAT, FAH, AMDHD1, TDO2, PRODH2, DMGDH, UROC1, SLC27A2, HPD, PRODH	0		6.21E-10	1.36E-06
GO:0009310 amine catabolic process	16	TAT, HGD, HPD, PAH, TDO2, AASS, HAL, CDO1, AHCY, FTCD, UROC1, DMGDH, FAH, AMDHD1, PRODH, PRODH2	-1	SMOX	1.12E-09	2.46E-06
GO:0006869 lipid transport	20	APOC3, APOA5, SLC27A5, APOF, APOC1, APOB, APOM, RBP4, APOA1, SLC27A2, NPC1, APOA2, APOC2, APOC4, LIPC, ABCG5, APOA4, LCAT, APOL9A, APOE	-1	PITPNC1	1.22E-08	2.68E-05
GO:0008202 steroid metabolic process	23	APOC3, G6PC, SLC27A5, APOF, APOC1, CYP7B1, GC, SAA1, APOA1, NPC1, APOA2, CYP17A1, HMGCS2, HSD17B2, PON1, LIPC, SC4MOL, LCAT, SULT1A1, APOE, RDH9, HSD11B1, CYP51	-1	LEP	2.44E-08	5.34E-05
GO:0010876 lipid localization	20	APOC3, APOA5, SLC27A5, APOF, APOC1, APOB, APOM, RBP4, APOA1, SLC27A2, NPC1, APOA2, APOC2, APOC4, LIPC, ABCG5, APOA4, LCAT, APOL9A, APOE	-1	PITPNC1	4.38E-08	9.58E-05
GO:0006958 complement activation, classical pathway	11	MBL1, C8A, MBL2, C8B, C4BP, C9, HC, C3, CFI, C2, C8G	0		6.56E-08	1.44E-04
GO:0009991 response to extracellular stimulus	17	G6PC, APOM, ASL, ASGR1, SERPINC1, HMGCS2, ALDOB, LOC100048662, ALB, ABCG5, EIF2AK4, CP, CBS, PPARA, ANGPTL4, FOXA3, AVPR1A	-4	GDAP1, LEP, SFRP2, COL1A1	8.45E-08	1.85E-04
GO:0002455 humoral immune response mediated by circulating immunoglobulin	11	MBL1, C8A, MBL2, C8B, C4BP, C9, HC, C3, CFI, C2, C8G	0		3.40E-07	7.42E-04
GO:0009309 amine biosynthetic process	14	CTH, AGXT, PAH, ASL, ASS1, GLUL, DDC, BHMT2, AGMAT, PNMT, CBS, BHMT, PRODH, PRODH2	-1	AMD1	3.59E-07	7.84E-04
GO:0002541 activation of plasma proteins involved in acute inflammatory response	11	MBL1, C8A, MBL2, C8B, C4BP, C9, HC, C3, CFI, C2, C8G	0		4.55E-07	9.94E-04
GO:0006956 complement activation	11	MBL1, C8A, MBL2, C8B, C4BP, C9, HC, C3, CFI, C2, C8G	0		4.55E-07	9.94E-04
GO:0006952 defense response	38	CXCL13, MBL2, ORM1, HAMP, CFI, F2, KNG1, SAA2, CRP, HC, C4BP, SERPINA3N, APOM, C8A, AHSG, ORM2, SERPINA1A, SAA1, SAA4, SERPINA1B, C9, CXCL1, SERPINF2, KLKB1, SLC7A2, MBL1, ORM3, SAA3, C8B, CD14, APOA4, C8G, C2, CXCL10, CXCL2, CHI3L3, C3, BNIP3	-2	CCL8, CCL21A	5.68E-07	0.001241
GO:0016125 sterol metabolic process	14	APOC3, APOF, APOC1, CYP7B1, SAA1, APOA1, APOA2, HMGCS2, PON1, LIPC, SC4MOL, LCAT, APOE, CYP51	-1	LEP	7.12E-07	0.001555
GO:0009725 response to hormone stimulus	20	SERPINA3K, TAT, FOXO1, AGXT, SERPINA3M, SERPINA3N, ASL, AHSG, SERPINA1A, RBP4, SERPINA1B, IRS2, HMGCS2, ALDOB, LOC100048662, EIF4EBP1, SERPINA1C, HMGB2, GCLC, LCAT	-2	LEP, COL1A1	7.21E-07	0.001575
GO:0031667 response to nutrient levels	15	G6PC, APOM, ASL, SERPINC1, HMGCS2, ALDOB, LOC100048662, ALB, ABCG5, EIF2AK4, CP, CBS, PPARA, ANGPTL4, FOXA3	-3	GDAP1, LEP, COL1A1	1.01E-06	0.002209
GO:0008203 cholesterol metabolic process	13	APOC3, APOF, APOC1, CYP7B1, SAA1, APOA1, APOA2, HMGCS2, PON1, LIPC, LCAT, APOE, CYP51	-1	LEP	1.38E-06	0.003015
GO:0043434 response to peptide hormone stimulus	14	SERPINA3K, FOXO1, SERPINA3M, SERPINA3N, ASL, AHSG, SERPINA1A, RBP4, SERPINA1B, IRS2, HMGCS2, ALDOB, EIF4EBP1, SERPINA1C	-2	LEP, COL1A1	1.87E-06	0.004084
GO:0006090 pyruvate metabolic process	8	G6PC, AGXT, FBP1, SDS, RBP4, ALDOB, PDK4, ATF3	-1	GPD2	2.01E-06	0.00438
GO:0008652 cellular amino acid biosynthetic process	11	GLUL, CTH, BHMT2, ASS1, BHMT, PRODH2, PAH, ASL, AGXT, CBS, PRODH	0		3.40E-06	0.007417
GO:0006959 humoral immune response	12	TRAF3IP2, MBL1, C8A, MBL2, C8B, C4BP, C9, HC, C3, CFI, C2, C8G	0		3.49E-06	0.007598
GO:0030198 extracellular matrix organization	4	AGT, LGALS3, VTN, CYR61	-12	RECK, OLFML2B, COL3A1, POSTN, COL5A3, COL5A2, SERPINH1, ABI3BP, COL5A1, KAZALD1, COL11A1, DPT	4.12E-06	0.008962
GO:0009719 response to endogenous stimulus	20	SERPINA3K, TAT, FOXO1, AGXT, SERPINA3M, SERPINA3N, ASL, AHSG, SERPINA1A, RBP4, SERPINA1B, IRS2, HMGCS2, ALDOB, LOC100048662, EIF4EBP1, SERPINA1C, HMGB2, GCLC, LCAT	-2	LEP, COL1A1	4.28E-06	0.009315
GO:0010033 response to organic substance	38	SERPINA3K, TAT, FOXO1, AGXT, SERPINA3M, APCS, PPP1R15A, SERPINA3N, APOM, ASL, AHSG, SERPINA1A, RBP4, SERPINA1B, IRS2, HMGCS2, ALDOB, GLUL, LOC100048662, EIF4EBP1, SERPINA1C, HMGB2, GCLC, ALB, 1100001G20RIK, CD14, EIF2AK4, CYP2D22, MYC, LCAT, HNF4A, EDEM1, ACP5, CREB3L3, APOE, NFKBIA, CYR61, GYS2	-3	NNAT, LEP, COL1A1	4.35E-06	0.009458
GO:0032101 regulation of response to external stimulus	13	HRG, PLG, CPB2, AHSG, APOH, NPC1, PROC, F12, KLKB1, SLC7A2, ZFP36, PPARA, C3	-3	CCL21A, LEP, BCL6	5.28E-06	0.011479
GO:0030193 regulation of blood coagulation	7	F12, KLKB1, APOH, HRG, CPB2, PLG, PROC	0		5.69E-06	0.012365
GO:0019439 aromatic compound catabolic process	7	TDO2, ALDH1L1, HGD, PAH, TAT, HPD, FAH	0		9.19E-06	0.019892
GO:0051604 protein maturation	13	MBL2, CFI, HC, C4BP, AMBP, C8A, C9, MBL1, C8B, MYC, C8G, C2, C3	-2	SERPINH1, PTHLH	1.07E-05	0.023062
GO:0030301 cholesterol transport	8	NPC1, APOB, ABCG5, APOA1, APOE, LCAT, LIPC, APOM	0		1.30E-05	0.028076
GO:0000096 sulfur amino acid metabolic process	8	CTH, BHMT2, AHCY, GCLC, BHMT, GNMT, CDO1, CBS	0		1.30E-05	0.028076
GO:0015918 sterol transport	8	NPC1, APOB, ABCG5, APOA1, APOE, LCAT, LIPC, APOM	0		1.30E-05	0.028076
GO:0006957 complement activation, alternative pathway	6	C8A, C8B, C9, HC, C3, C8G	0		1.44E-05	0.031079
GO:0009064 glutamine family amino acid metabolic process	10	ARG1, AMDHD1, GLUL, GCLC, ASS1, PRODH2, ASL, CPS1, PRODH, FAH	0		2.16E-05	0.046095