

Supplementary Table S1. Primer information

Species	Gene	Product size (bp)	Tm (°C)	Sequence (F)	Sequence (R)
Mouse	GAPDH	155	59	5'-tgctgggtgctgagtatgtcg-3'	5'-caagcagttgggtgtacagg-3'
Mouse	MSTN	163	59	5'-acgtaccacgggaacaac-3'	5'-ggagtctgacgggtctgag-3'
Mouse	MYOG	185	59	5'-tccagtacattgagcgccta-3'	5'-caaatgatctcctgggttg-3'
Mouse	MYL2	177	59	5'-aaagaggctccagtcgaat-3'	5'-cctctctgctgtgtgtca-3'
Mouse	Atrogin1	160	59	5'-ttcagcagcctgaactacga-3'	5'-tgaaagcttccccaaagta-3'
Mouse	CD163	218	59	5'-ctggctggtggaagtga-3'	5'-cgccactgagcatagtga-3'
Mouse	RAGE	160	59	5'-aggagctgcagagctgaat-3'	5'-ctggttgagaaggaagtc-3'
Mouse	Gli1	228	59	5'-cctattggaatgggtccaac-3'	5'-taccagagcttcagccact-3'
Mouse	PPAR γ	232	59	5'-aagagctgaccaatggtg-3'	5'-accctgcatcctcacaag-3'
Mouse	CD36	187	59	5'-tggagctgttattggtgcag-3'	5'-tgggtttgcacataaaga-3'
Mouse	P53	242	59	5'-cgggtggaaggaaatttga-3'	5'-gcacaaacacgaacctcaa-3'
Mouse	Bax	173	59	5'-tgcagaggatgattgctgac-3'	5'-gatcagctcgggcacttag-3'
Mouse	FOXO3	215	59	5'-ttaaggataaggcgacag-3'	5'-cctcggctcttggtgtactt-3'

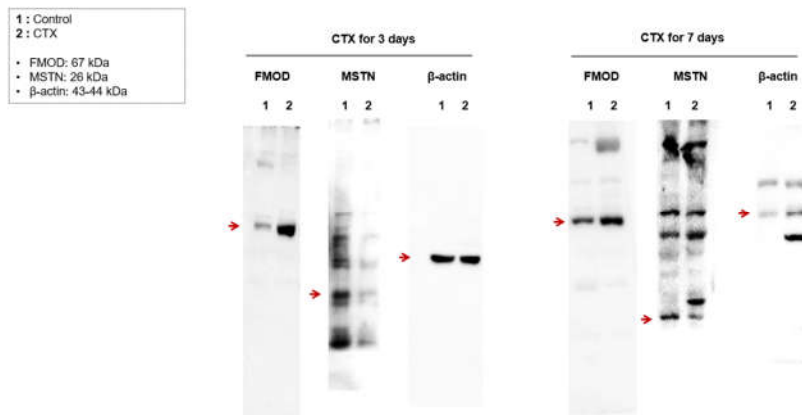
Supplementary Figure S1.

Figure 2

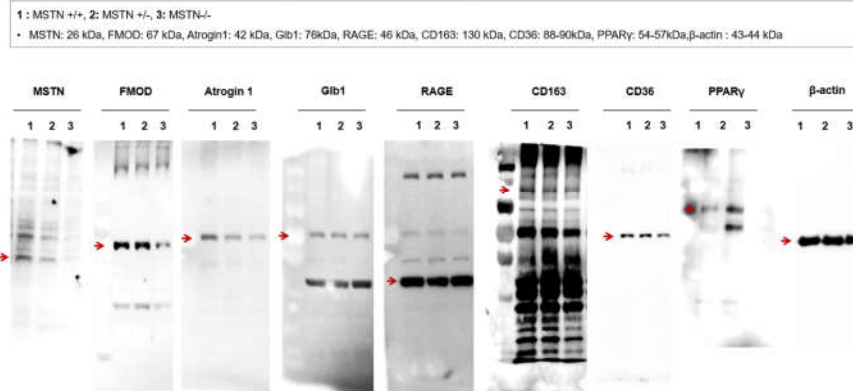


Figure 3

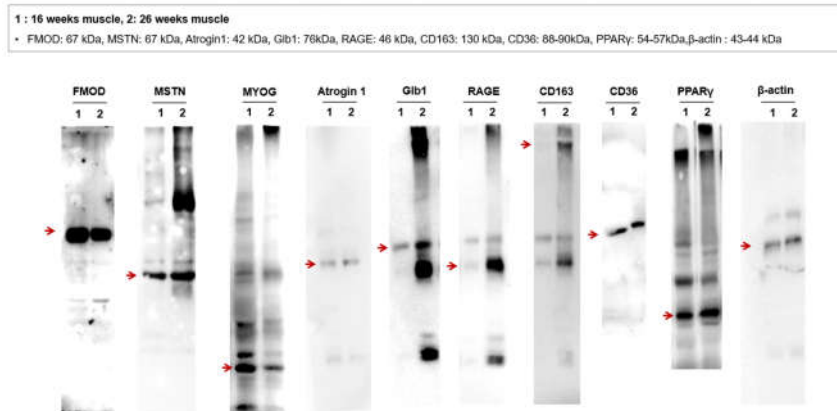


Figure 3

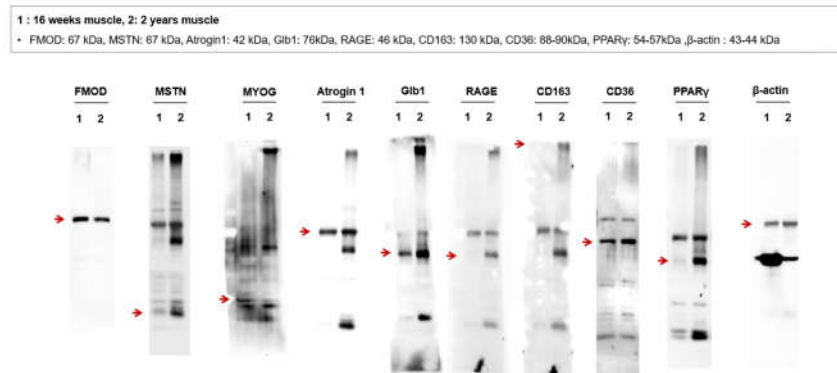


Figure 4

1 : Control, 2: Ceramide
• FMOD: 67 kDa, MSTN: 67 kDa, Atrogin1: 42 kDa, Glib1: 76kDa, RAGE: 46 kDa, CD163: 130 kDa, CD36: 88-90kDa, PPAR γ : 54-57kDa, β -actin : 43-44 kDa

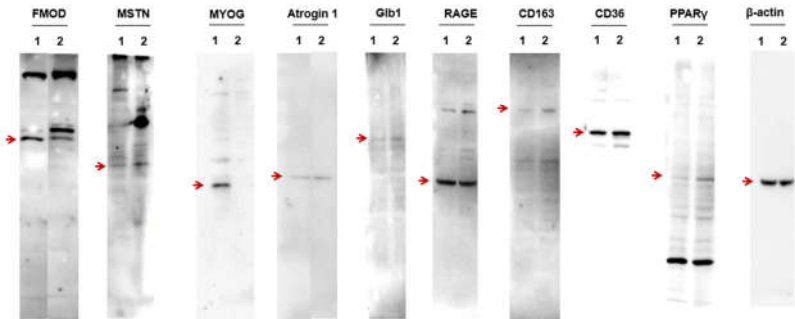


Figure 5

1 : Day 0, 2: Day 4
• FMOD: 67 kDa, MSTN: 67 kDa, CD36: 88-90kDa, PPAR γ :54-57kDa, β -actin:43-44 kDa

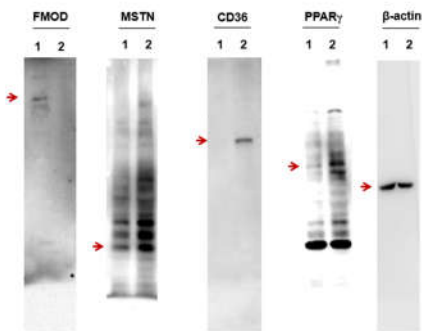


Figure 5

1 : FMODwt, 2. FMODkd
• FMOD: 67 kDa, MSTN: 67 kDa, CD36: 88-90kDa, PPAR γ :54-57kDa, β -actin:43-44 kDa

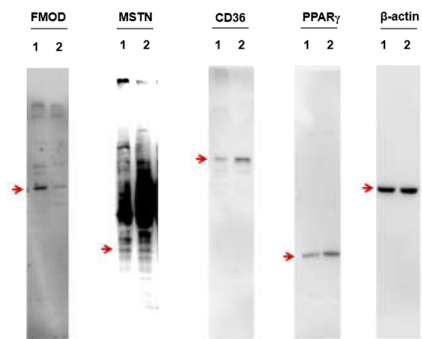


Figure 5

1 : MSTNwt, 2. MSTNkd
• FMOD: 67 kDa, MSTN: 67 kDa, CD36: 88-90kDa, PPAR γ :54-57kDa, β -actin:43-44 kDa

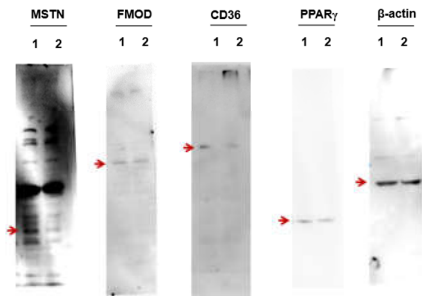
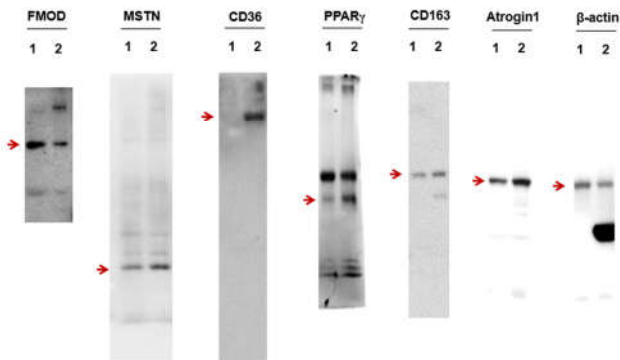


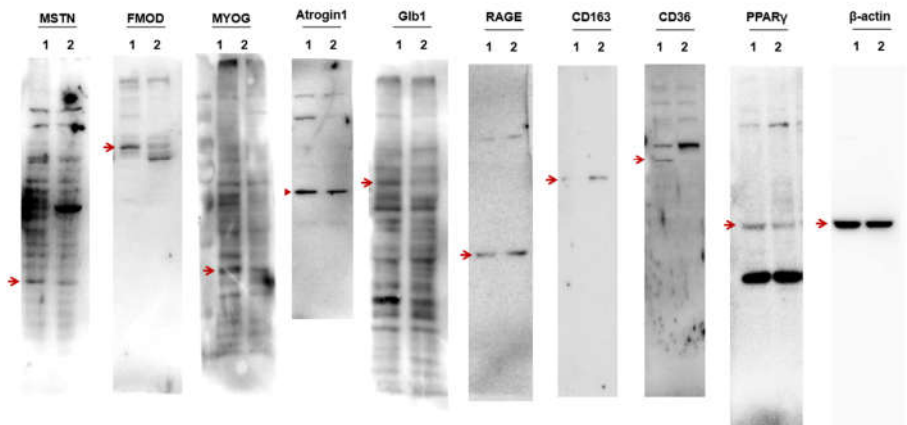
Figure 6

1 : Normal, 2. HFD
• FMOD: 67 kDa, MSTN: 67 kDa, CD36: 88-90kDa, PPAR γ :54-57kDa, β -actin:43-44 kDa, CD163: 130 kDa, Atrogin1: 42 kDa



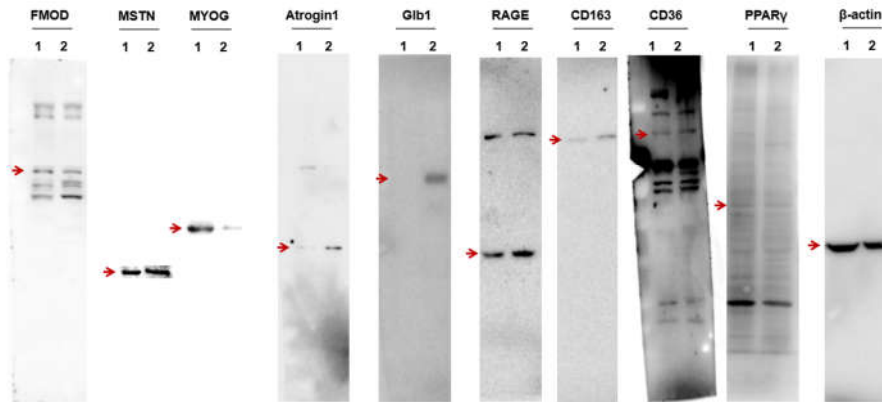
Supplementary Figure 1

1 : MSTNwt, 2. MSTNkd
• FMOD: 67 kDa, MSTN: 67 kDa, CD36: 88-90kDa, PPAR γ :54-57kDa, β -actin:43-44 kDa, CD163: 130 kDa, Atrogin1: 42 kDa

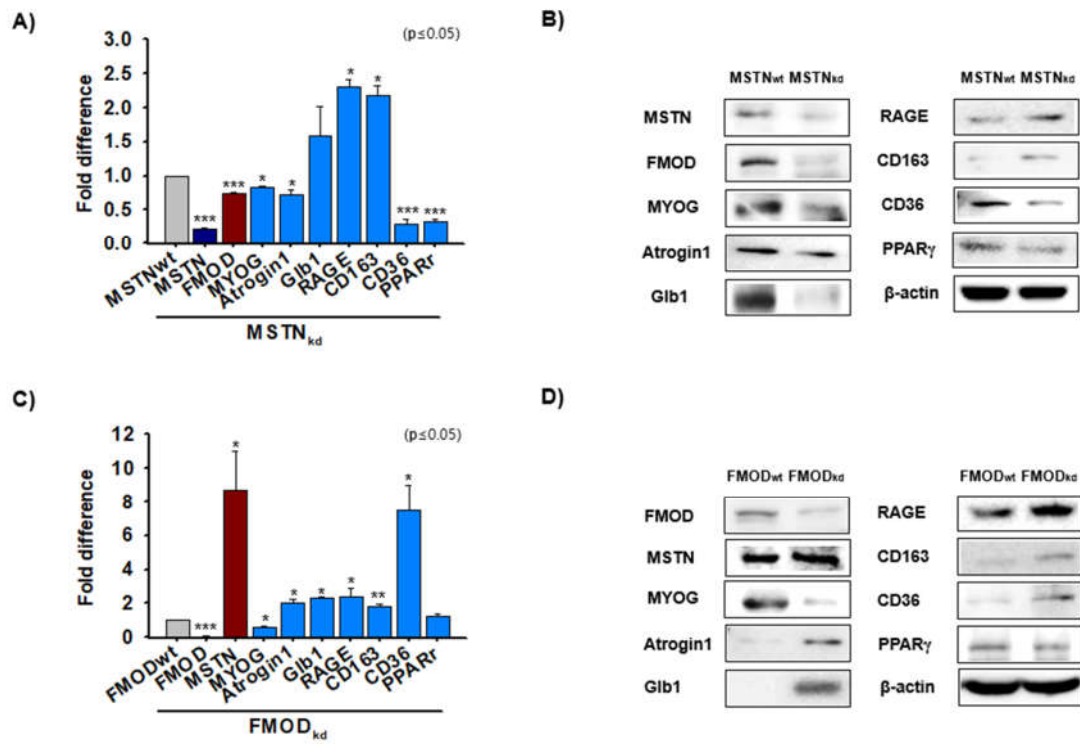


Supplementary Figure 1

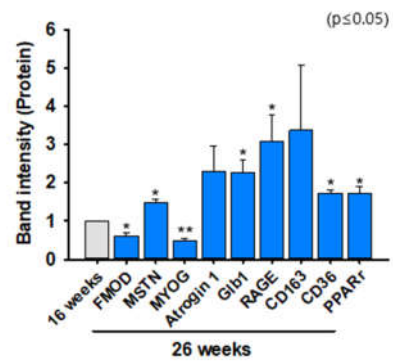
FMODwt_2%FBS



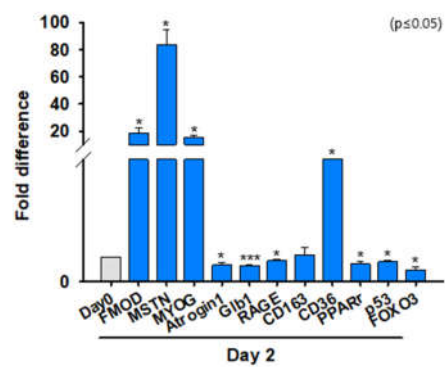
Supplementary Figure S2.



Supplementary Figure S3.



Supplementary Figure S4.



Supplementary Figure S5.

