Table S1. **Pair wise comparisons of mRNA and protein levels between experimental and normal muscles**

	Mean	Pairs (n)	
Myogenin RNA			
SOL Norm/EDL Norm	5.96	6	*
EDL S-stim 10h/ EDL Norm	0.97	7	n.s
EDL S-stim 5d/ EDL Norm	2.96	7	*
EDL S-stim 14d/ EDL Norm	2.13	6	*
MyoD RNA			
SOL Norm/EDL Norm	0.09	6	*
EDL S-stim 10h/ EDL Norm	1.45	7	n.s
EDL S-stim 5d/ EDL Norm	0.74	7	n.s
EDL S-stim 14d/ EDL Norm	0.49	6	*
Myogenin protein			
SOL Norm/EDL Norm	8.80	6	*
EDL S-stim 10h/ EDL Norm	1.55	10	**
EDL S-stim 14d/ EDL Norm	2.76	7	*
SOL F-stim 14d/ SOL Norm	0.61	6	*
MyoD protein			
SOL Norm/EDL Norm	0.48	7	*
EDL S-stim 10h/ EDL Norm	1.07	10	n.s
EDL S-stim 14d/ EDL Norm	0.51	6	*
SOL F-stim 14d/ SOL Norm	1.37	6	n.s
P-T115 MyoD protein			
SOL Norm/EDL Norm	3.20	11	*
EDL S-stim 10h/ EDL Norm	1.41	10	*
EDL S-stim 14d/ EDL Norm	2.10	7	*
SOL F-stim 14d/ SOL Norm	1.00	6	n.s

Data sets were compared using a Wilcoxon signed rank test. Significant differences *, $P < 0.05$; **, $P < 0.01$ between different experimental muscles and normal muscles

Table S2. **Fiber type distribution**

	I	I/IIa	IIa	IIx	I/IIx
Mouse					
Normal	50	1	49	0	0
Sham	51$^{n.s}$	2$^{n.s}$	47$^{n.s}$	0	0
MyoD	45$^{n.s}$	2$^{n.s}$	50$^{n.s}$	2$^{n.s}$	1$^{n.s}$
MyoD Denerv	36***	14***	37**	5*	8***
Denerv	53$^{n.s}$	3$^{n.s}$	43$^{n.s}$	1$^{n.s}$	0
MyoD-T115	15***	34***	32***	9***	10***
MyoD-S200	45$^{n.s}$	2$^{n.s}$	50$^{n.s}$	2*	1$^{n.s}$
Rat					
Normal	87	1	12	0	0
Sham	85$^{n.s}$	1$^{n.s}$	12$^{n.s}$	2$^{n.s}$	0
MyoD	68***	2$^{n.s}$	23***	3***	4***
MyoD Denerv	62***	2$^{n.s}$	22**	4***	10***
Denerv	88$^{n.s}$	3$^{n.s}$	8$^{n.s}$	0	1$^{n.s}$
MyoD-T115	38***	18***	38***	0	6***

Fiber types are defined by MyHC isoform staining (see methods). Values are given in percent. Significant differences *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$, between experimental fibers (sham, MyoD, MyoD Denerv, denerv and myoD-T115) and normal fibers (Normal).