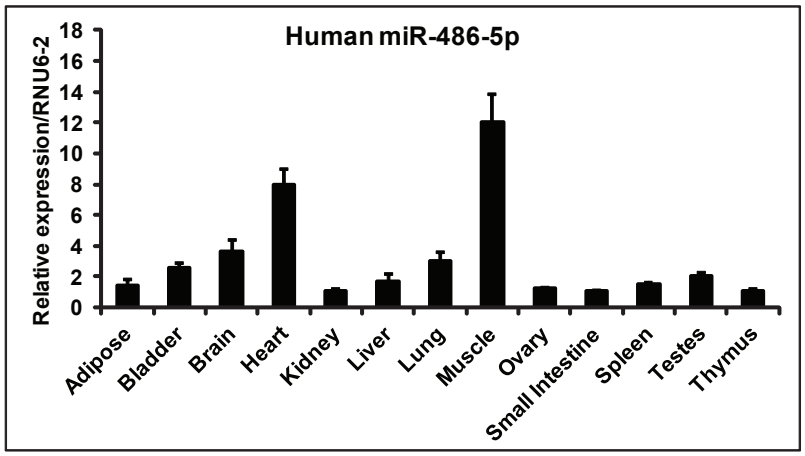
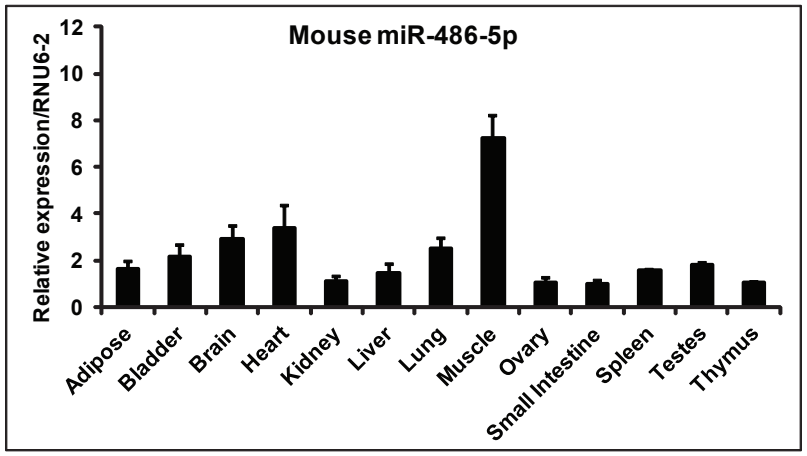
Supplemental Figure S1

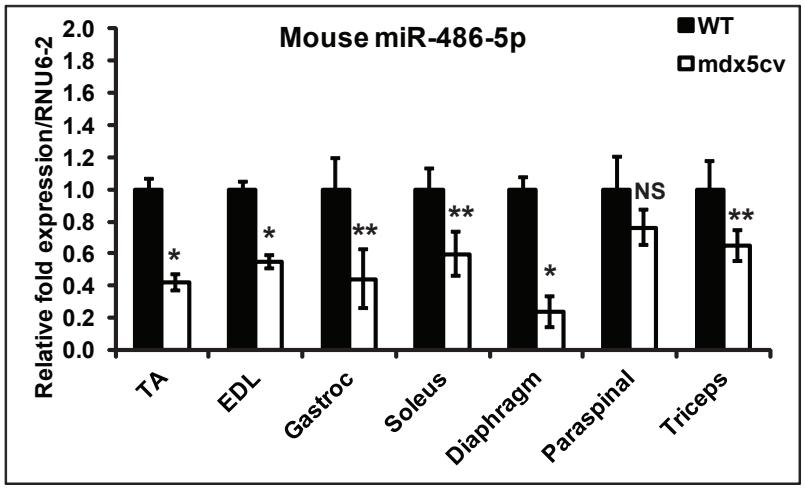
A.



B.

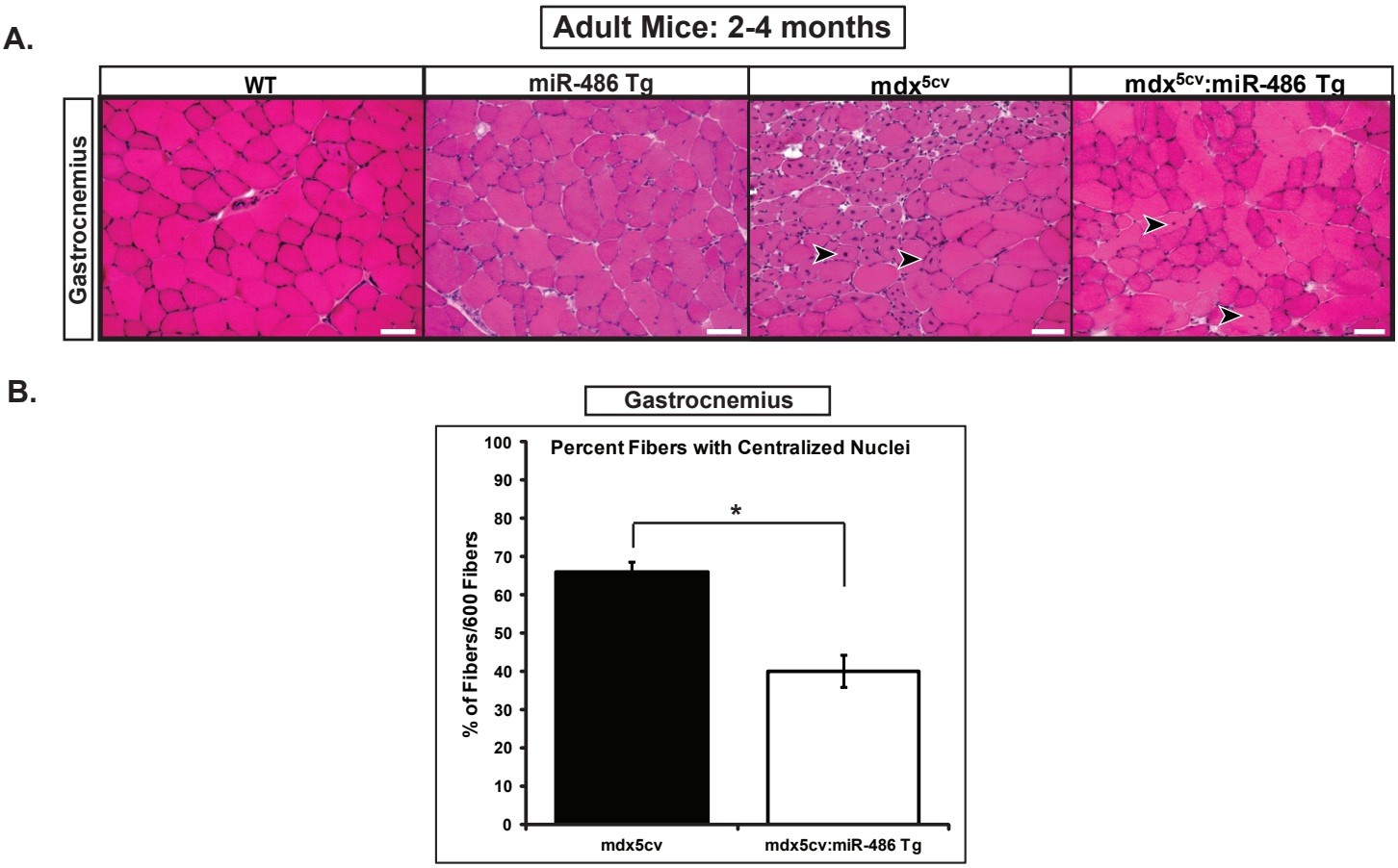


C.



Supplemental Figure S1: MicroRNA-486 is a muscle-enriched microRNA whose expression is reduced in dystrophin-deficient muscle.

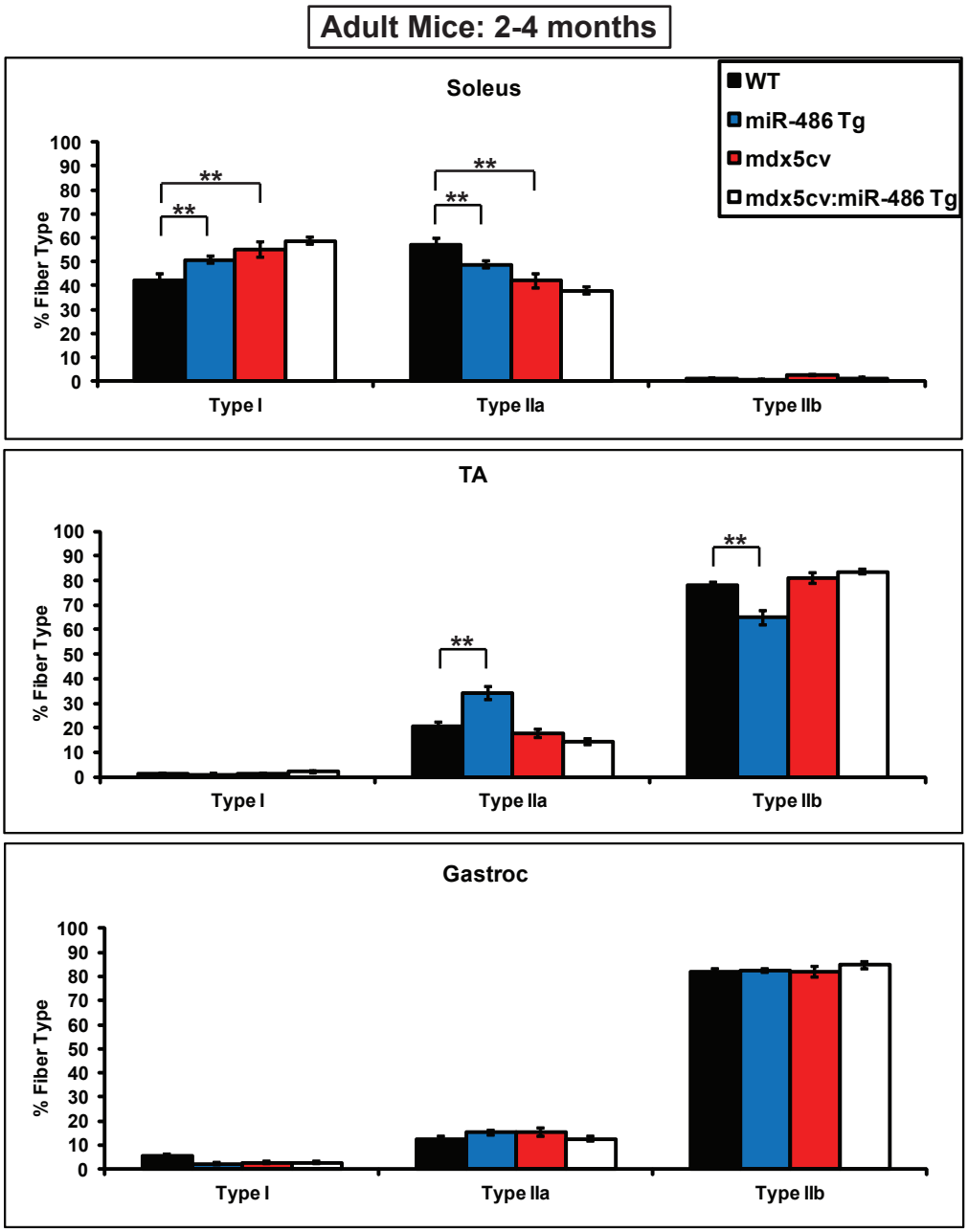
Supplemental Figure S2



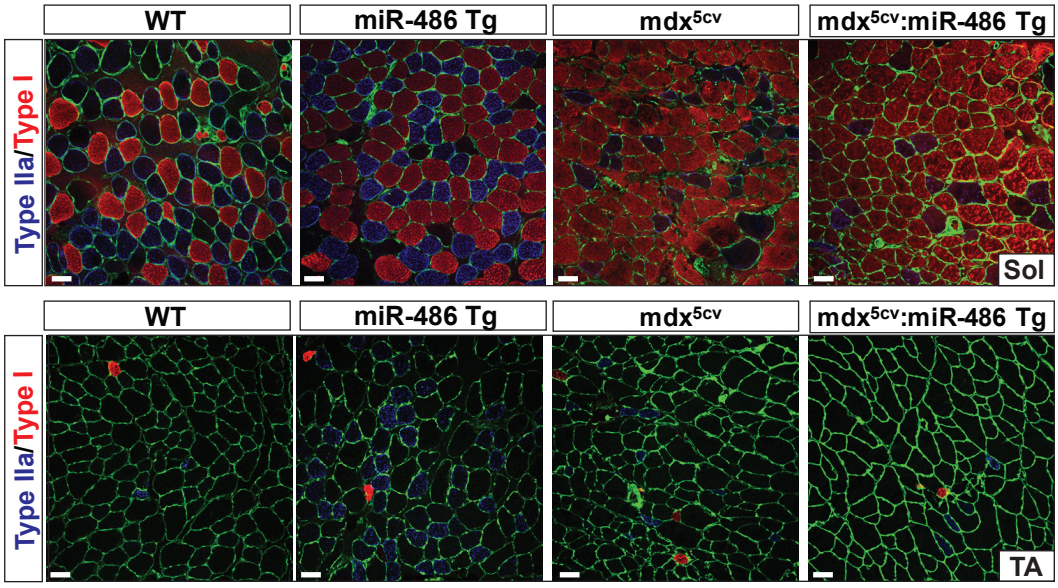
Supplemental Figure S2: MicroRNA-486 overexpressing mice have improved gastrocnemius mdx5cv muscle histology.

Supplemental Figure S3

A.

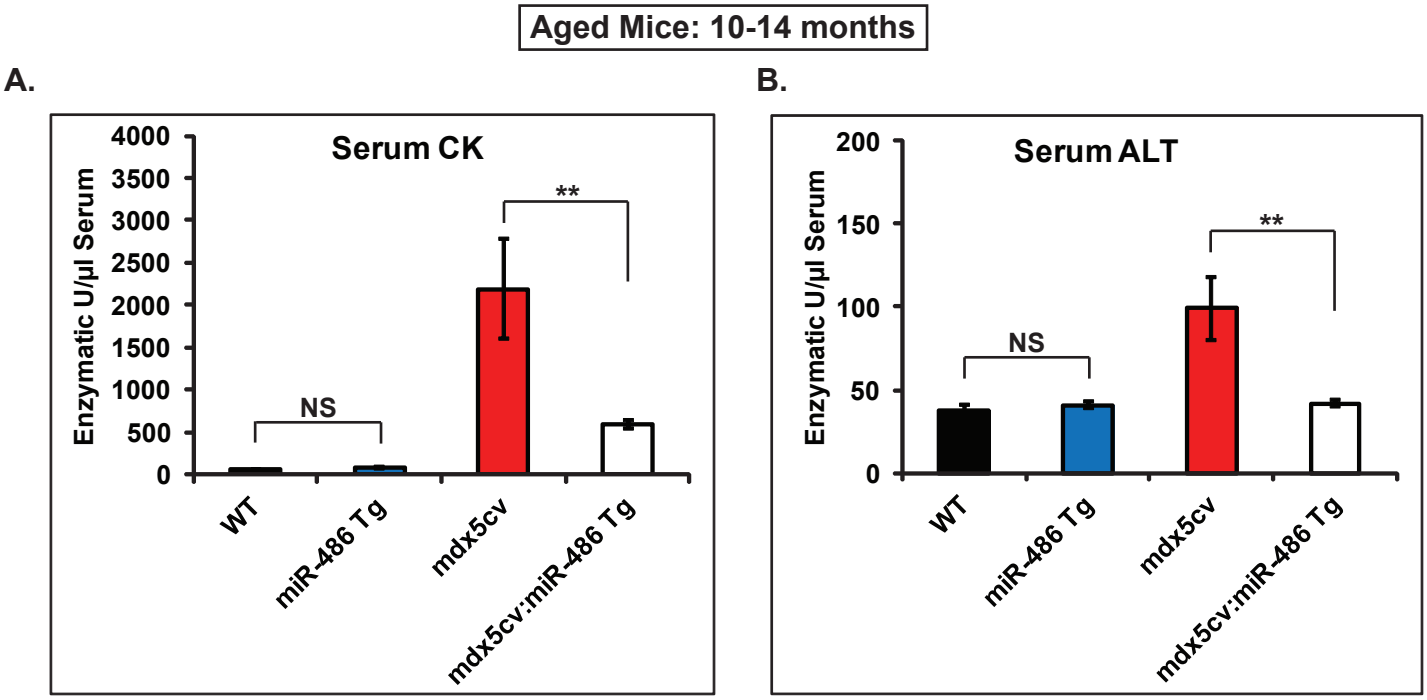


B.



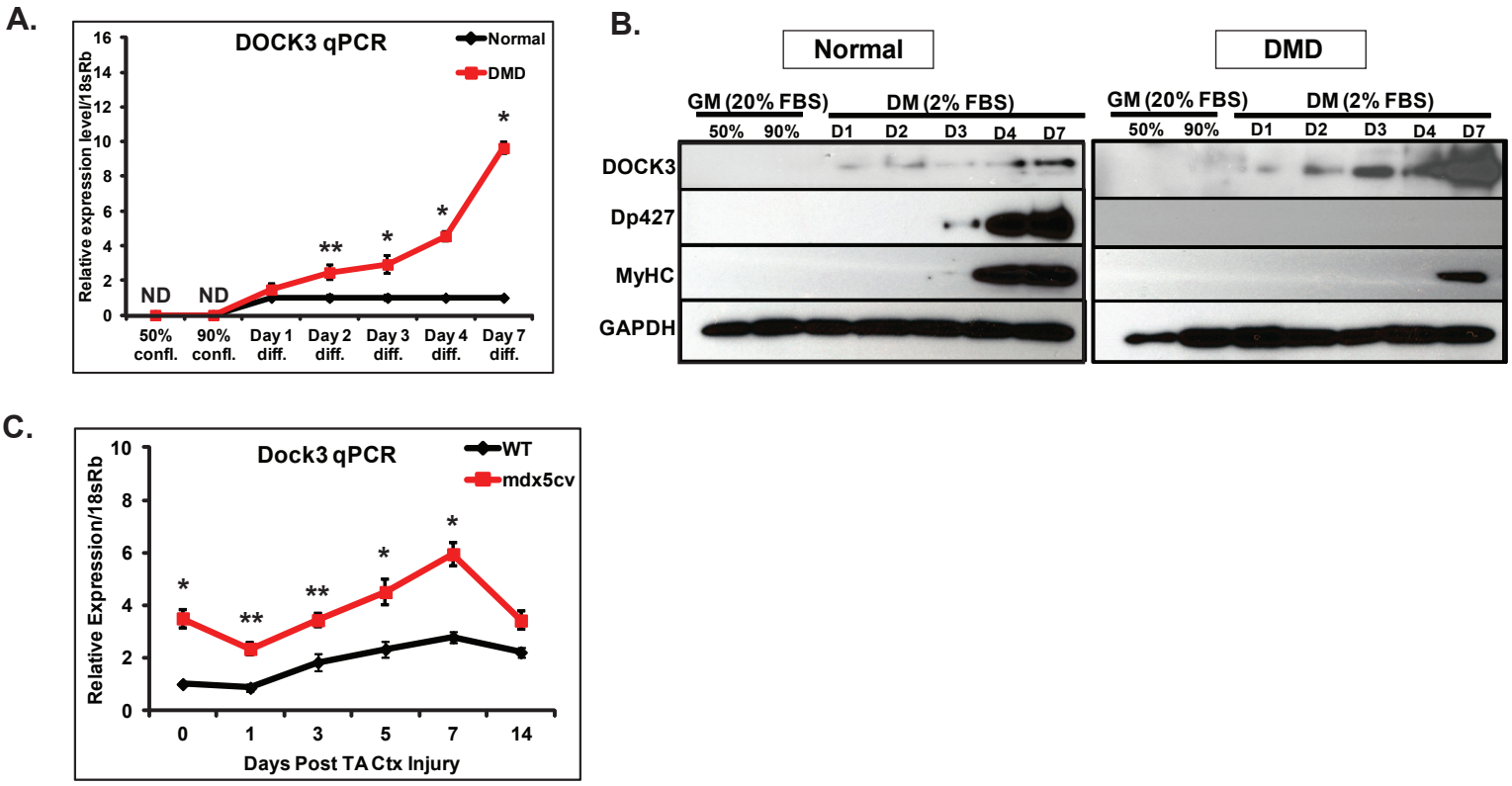
Supplemental Figure S3: Skeletal muscle fiber type is not significantly altered in miR-486 overexpressing mice.

Supplemental Figure S4



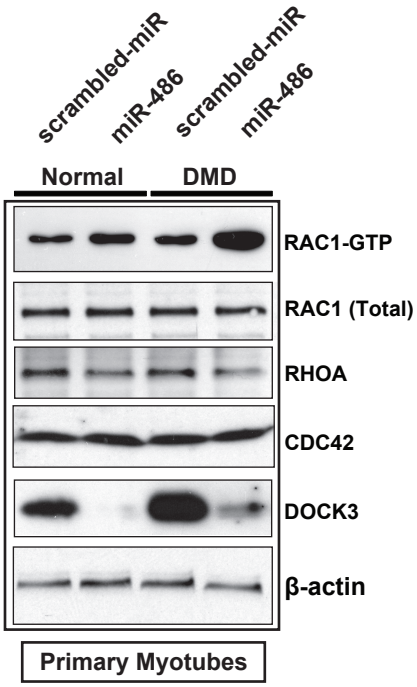
Supplemental Figure S4: Serum dystrophic biochemistries are improved in aged dystrophic mice.

Supplemental Figure S5



Supplemental Figure S5: DOCK3 expression increases during myogenic differentiation and is highly expressed in DMD myotubes.

Supplemental Figure S6



Supplemental Figure S6: Overexpression of miR-486 in dystrophic myotubes increases activated RAC1 expression levels.

Supplemental Table S1

Primary Antisera

Antibody	Company	Species	Use/Dilution
β-tubulin-HRP	Cell Signaling Technology	Rabbit monoclonal	WB: 1:2000
β-actin (AC-15)	Sigma-Aldrich	Mouse monoclonal	WB: 1:2000
GAPDH (FL-335)	Santa Cruz Biotechnologies	Rabbit polyclonal	WB: 1:5000
PTEN	Cell Signaling Technology	Rabbit monoclonal	WB: 1:1000
phospho-AKT (S473)	Cell Signaling Technology	Rabbit monoclonal	WB: 1:1000
phospho-AKT (T308)	Cell Signaling Technology	Rabbit monoclonal	WB: 1:1000
AKT (pan) (C67E7)	Cell Signaling Technology	Rabbit monoclonal	WB: 1:1000
AKT1	Cell Signaling Technology	Rabbit monoclonal	WB: 1:1000
AKT2	Cell Signaling Technology	Rabbit monoclonal	WB: 1:1000
AKT3	Cell Signaling Technology	Rabbit monoclonal	WB: 1:1000
DOCK3/MOCA (H-93)	Santa Cruz Biotechnologies	Rabbit polyclonal	WB: 1:1000
Hemagglutinin/HA	Clontech Laboratories, Inc	Rabbit polyclonal	WB: 1:1000
Cleaved Caspase-3 (5A1E)	Cell Signaling Technology	Rabbit monoclonal	WB: 1:1000
Rac1	ThermoScientific	Mouse monoclonal	WB: 1:1000
RhoA (67B9)	Cell Signaling Technology	Rabbit monoclonal	WB: 1:1000
Cdc42 (11A11)	Cell Signaling Technology	Rabbit monoclonal	WB: 1:1000
Dystrophin (C-term)	Abcam	Rabbit polyclonal	WB: 1:1000
Myosin Heavy Chain	Maine Biotechnology	Mouse monoclonal	WB: 1:1000
Laminin α2 (4H8-2)	Sigma-Aldrich	Rat monoclonal	IF: 1:200
Laminin (L9393)	Sigma-Aldrich	Rabbit polyclonal	IF: 1:200
MF20 (myosin heavy chain)	DSHB Iowa	Mouse monoclonal	IF: 1:50
BA-F8 (Type I, slow myosin)	DSHB Iowa	Mouse monoclonal	IF: 1:200
SC-71 (Type IIa myosin)	DSHB Iowa	Mouse monoclonal	IF: 1:50
BF-F3 (Type IIb myosin)	DSHB Iowa	Mouse monoclonal	IF: 1:50

Supplemental Table S1: List of primary antibodies used in this manuscript.

Supplemental Table S2

Real Time qPCR Primers

Primer Name	Gene Symbol	Sequence 5' to 3'	Species
hDOCK3_qPCR_forward1	DOCK3	CAGGTGCGGGAGGTTAAGC	Human
hDOCK3_qPCR_reverse1	DOCK3	CTGAGACACTAATCTGGTCCGA	Human
h18sRib_qPCR_forward1	18sRib	CCGATAACGAACGAGACTCTGG	Human
h18sRib_qPCR_reverse1	18sRib	TAGGGTAGGCACACGCTGAGCC	Human
mDock3_qPCR_forward1	Dock3	AGAGGAGTTTCAACAAAGAAGCC	Mouse
mDock3_qPCR_reverse1	Dock3	CAGACTGGCCCACTCTTGTAG	Mouse
18sRib_qPCR_forward1	18sRib	CTCAACACGGGAAACCTCAC	Mouse
18sRib_qPCR_reverse1	18sRib	TGCCAGAGTCTCGTTCGTTAT	Mouse

Supplemental Table S2: List of real time PCR primers used in this manuscript.