Table S1. Muscle disease genes, their *Drosophila* homologs and their primary RNAi muscle phenotypes

Disease genes	Gene product	E-value	Fly homolog	Fbgn#	RNAi phenotypes
Congenital myopathies					
NEB	Nebulin	6.30E-12	Lasp	FBgn0063485	Class I
ACTA1	Alpha-actin, skeletal	0	Act57B	FBgn0000044	Class IV
		0	Act42A	FBgn0000043	Class IV
		0	Act87E	FBgn0000046	Class IV
		0	Act5C	FBgn0000042	Class IV
TPM1; TPM2	Alpha, beta-tropomyosin	7.60E-45	Tm1	FBgn0003721	N
TNNT1	Slow troponin T	6.30E-06	up	FBgn0004169	Class III
MTM1	Myotubularin	0	mtm	FBgn0025742	Class II
RYR1	Ryanodin receptor	0	Rya-r44F	FBgn0011286	Class III
ITGA7	Integrin alpha7	6.00E-88	mew	FBgn0004456	Class I
Cardiomyopathies					
FHC1 (MYH6, MYH7)	Cardiac myosin heavy chain	0	Mhc	FBgn0002741	Class III
FHC2 (=TTNT2)	Cardiac troponin T		up	FBgn0004169	Class III
FHC3 (MyBP-C)	Cardiac myosin binding protein-C	1.30E-69	sls	FBgn0003432	Class II
MYL2	Regulatory myosin light chain	2.00E-41	sqh	FBgn0003514	Class II
		8.00E-27	mlc2	FBgn0002773	Class III
MYL3	Essential myosin light chain	4.00E-34	mlc-c	FBgn0004687	N
TNNI3 (=TNNCI)	Cardiac troponin I	3.00E-06	wupA	FBgn0004028	Class III
FHC9	Titin: myosin light chain kinase	0	bt		Class III
CMD1G (=TTN)	Titin	0	bt	FBgn0005666	Class III
VCL	Vinculin	1.00E-92	Vinc	FBgn0004397	Class IV
ARVD2 (=RYR2)	Ryanodin receptor	0	Rya-r44F	FBgn0011286	Class III
G4.5	Tafazzin	2.00E-58	tafazzin	FBgn0026619	Class II
Muscular dystrophies					
DMD	Dystrophin	0	Dys	FBgn0024242	N
LMNA	LaminA/C	4.90E-79	Lam	FBgn0002525	N
DYSF	Dysferlin	2.20E-93	mfr	FBgn0035935	N
SGCG	Sarcoglycan, gamma	1.00E-43	Scgdelta	FBgn0025391	N
CAPN3	Calpain-3	1.00E-178	CalpB	FBgn0025866	Class III
SGCA	Sarcoglycan, alpha	3.00E-13	Scgalpha	FBgn0032013	N
SGCD	Sarcoglycan, delta	6.00E-48	Scgdelta	FBgn0025391	N
TRIM32	TRIM32	7.00E-15	CG15105	FBgn0034412	Class II
LAMA2	Laminin alpha 2	0	wb	FBgn0004002	N

Human muscle disease genes were selected based on the gene lists from Bornemann and Goebel (Bornemann and Goebel, 2001), Clarkson et al. (Clarkson et al., 2004) for congenital myopathies; Seidman and Seidman (Seidman and Seidman, 2001) for cardiomyopathies; the MDA website (http://www.mdausa.org/disease/) and Dalkilic and Kunkel (Dalkilic and Kunkel, 2003) for muscular dystrophies. *Drosophila* genes that are homologous to human disease genes were chosen based on their protein homology with the lowest E value (and at least ⩽–5) for a match to human protein (BLASTP) in Homophila (http://superfly.ucsd.edu/homophila/) (Chien et al., 2002), as well as their expression in muscle tissues (http://www.fruitfly.org/cgi-bin/ex/insitu.pl). Information on the dsRNAs targeting the *Drosophila* genes is available in Table S2 and from http://flyrnai.org/. The various phenotypic classes are indicated (see text).
N, no muscle phenotypes.