

Table S1. Primer for motor neuron genes

Gene	Forward Primer	Reverse Primer
Agrn	GGACTCAGAAGGCTCCAAGTGT	GTCAGCCATCTCTGGTGTGTAG
SYT2	CATGTTCCGCAAGCTGAAGGAG	GATGCAGAAGCAACAGGTGAGC
Snap25	ATCAGTGGTGGCTTCATCCGCA	TGGCGGAGGTTTCCGATGATGC
Snapin	TAATGCCAGGCGACGAGTTGTC	CCTGAATCCAGCATAGCTCTCC
Vamp1	GGAAGAAAGCAGTCAGTGTAGCC	GGAACATACGCTCCAGGCTTGG
Vamp2	GAGCTGGATGACCGTGCAGATG	ATGGCGCAGATCACTCCCAAGA
Vamp3	AGACCAGAAGCTCTCGGAGCTA	ACCAGGACACTGATCCCTATCG
Unc13a	TCGTGGATGAGTTTGCCATGCG	GTAGGCGTTGATGTTGGCAAGC
Unc13b	ATGCGCTATGGCATCGAGTCCA	CAGTAAGGTGCTCATCACGGCT
ChAT	GCTTGAATGGAGCGAATCGTTGG	CACCAGGACGATGCCATCAAAG
VACHT	CGTGTACCCTTTCTAGTGCTCG	ATGAGGCGATGGATAGGTGTGC
CHT	TCCATCCTGTGCGGCGAGTTCTA	TGCAGATGCTCCGAACACAAGC
AChE	CTACACCACGGAGGAGAGGA	CTGGTTCTTCCAGTGCACCA

Table S2. Primer for muscle genes

Gene	Forward Primer	Reverse Primer
LRP4	GGCAAAAAGCAGGAACTTGT	TCTACCCAGTGGCCAGAACT
MuSK	CCACACTGCGTGGAAATGAGC	CTCTGCAAATGGGCATGGG
DOK7	TCAGCCTCAGAAGAGCGTGTTG	GCCTCAGAAGAGGAACTGGATA
Rapsyn	GTGGATGAAGGTGCTGGAGAAG	CCGAGCAGTATCAATCTGGACC
CDK5	GTACTCCACGTCCATCGACATG	GCCATTGTTCTCAGTCGGTGT
AChE	CTACACCACGGAGGAGAGGA	CTGGTTCTTCCAGTGCACCA
AChRα1	CTGACATCTCTGGGAAGCCG	GGCGTTATTGGACTCCTGGT
AChRγ	GCTCAGCTGCAAGTTGATCTC	CCTCCTGCTCCATCTCTGTC
AChRϵ	GCTGTGTGGATGCTGTGAAC	GCTGCCCAAAAACAGACATT

Table S3. Information of Antibodies and dyes

Protein	Company	Catalog Number
α -actinin	Cell Signaling	6487S
β -actin	SantaCruz	SC-47778
ChAT	EMD Millipore	AB144P
CRABP1	Sigma	HPA017203
GFP	SantaCruz	SC-9996
p ^{T286} -CaMKII (WB)	Cell Signaling	12716S
p ^{T286} -CaMKII (IF)	SantaCruz	SC32289
p ^{T306} -CaMKII	Antibodypedia	P1005-306
CaMKII α	SantaCruz	SC-13141
CaMKII β	SantaCruz	SC-376828
Tuj1	Abcam	ab18207
SV2-s	DSHB	SV2
Gt Anti-Ms IgG antibody (HRP)	GeneTex	GTX26789
Gt Anti-Rb IgG antibody (HRP)	Jackson immunoResearch	800-367-5296
Dk Anti-Rb IgG antibody (Alexa 594)	Jackson immunoResearch	711-585-152
Dk Anti-Rb IgG antibody (Alexa 488)	Abcam	ab150073
Dk Anti-Gt IgG antibody (CFL 594)	SantaCruz	SC-362275
Gt Anti-Ms IgG antibody (Cy5)	Life Technologies	A10524
Gt Anti-Rb IgG antibody (Alexa 488)	Jackson immunoResearch	111-546-144
α BTX (CF 488)	Biotium	00005
α BTX (CF 594)	Biotium	00007