Table S1. Primer sequences for qRT-PCR analysis

Gene		5′ to 3′
Patched1	Forward	TTTTGGTTGTGGGTCTCCTC
	Reverse	TCCACCGTAAAGGAGGCTTA
Gli1	Forward	GAAGGAATTCGTGTGCCATT
	Reverse	GGATCTGTGTAGCGCTTGGT
Gli2	Forward	ACCATGCCTACCCAACTCAG
	Reverse	CTGCTCCTGTGTCAGTCCAA
Gli3	Forward	AGCAACCAGGAGCCTGAAGTC
	Reverse	GTCTTGAGTAGGCTTTTGTGC
Cdo	Forward	GTGTGCTTGGGGTTATGGTC
	Reverse	CTCCATTTATGTTTCCACTC
Boc	Forward	TGCTCTGGGTGTCTTCATCA
	Reverse	ATGGCATGATCAGGTAGTTG
Gas1	Forward	GGAACACTGACCCACACTC
	Reverse	AAAGACCCCCACCGTTCAG
Shh	Forward	CTGGCCAGATGTTTTCTGGT
	Reverse	GATGTCGGGGTTGTAATTGG
Oct4	Forward	AAGCCCTCCCTACAGCAGAT
	Reverse	GGTGCCTCAGTTTGAATGC
Nanog	Forward	GCTGCTCCGCTCCATAACTT
	Reverse	CTGGCTTTGCCCTGACTTTA
Sox2	Forward	CTGGAGTGGGAGGAAGAGGT
	Reverse	AACGGCAGCTACAGCATGA
Islet1	Forward	ACACCTTGGGCGGACCTGCTATG
	Reverse	TGAAACCACACTCGGATGACTCTG
Hb9	Forward	GTTGGAGCTGGAACACCAGT
	Reverse	CCAAATCTTCACCTGAGTCTCG
Pax6	Forward	AACAACCTGCCTATGCAACC
	Reverse	ACTTGGACGGGAACTGACAC
Nkx6.1	Forward	AACACACCAGACCCACGTTC
	Reverse	TGGAACCAGACCTTGACCTG
Olig2	Forward	CTGGTGTCTAGTCGCCCATC
	Reverse	AGGAGGTGCTGGAGGAAGAT
Chx10	Forward	GCTGGACACCAGCCAGAC
	Reverse	GCAGATTTGGACATTTTTCGAT
Dbx1	Forward	GAAGGACTCGCAGGTGAAAA
	Reverse	TGGGGGTTTAGTTTTGTGGG
Pax2	Forward	GGCATCTGDGATAATGACACA
	Reverse	GATCCCGTTGATGGAGTAGGA
Pax3	Forward	GGGAACTGGAGGCATGTTTA
	Reverse	GTTTTCCGTCCCAGCAATTA
Lbx1	Forward	CAGACCTCGCCTCTCTGC
	Reverse	CTCCTCTAGGTCCCGCTTG
Brn3a	Forward	CTCACGCTCTCGCACAAC
	Reverse	AGAGCTCCGGCTTGTTCAT
L32	Forward	GGCCTCTGGTGAAGCCCAAGATCG
	Reverse	CCTCTGGGTTTCCGCCAGTTTCGC
Daam2	Forward	AAATGTGAGAGACGGAGGGG
	Reverse	GTTCTTTCTTGGCACCTGTAGC
Uncx	Forward	CCGAGTTCAGGTCTGGTTCC
	Reverse	CTTGCGAGCGATCTCCTCTG

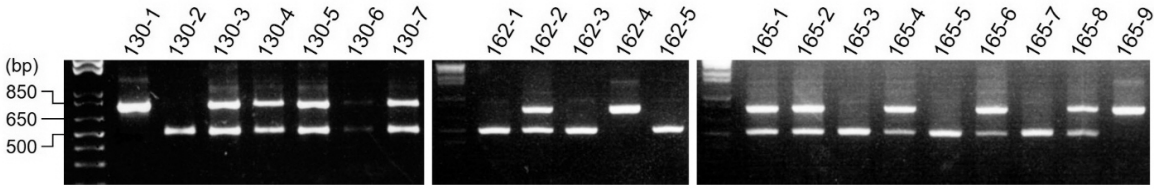

Fig. S1. Mouse genotyping for the current study. 550 bp and 800 bp of PCR products indicate wild type and homozygous *Cdo* mutants, respectively. Heterozygous *Cdo* mutants show both sized bands. For the current study, we selected 130-2, 162-1 and 165-5 for wild type, and 130-1, 162-4 and 165-9 for homozygous *Cdo* mutants.

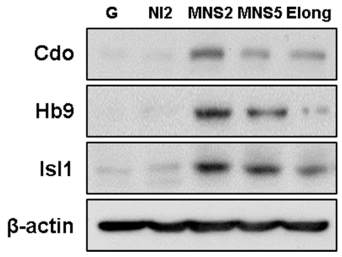

Fig. S2. The expression of Cdo during motor neuron specification and differentiation. Immunoblotting analysis for Cdo at G, NI2, MNS2, MNS5 and Elong. Hb9 and Isl1 were selected as motor neuron differentiation markers. β-actin was used as a loading control.

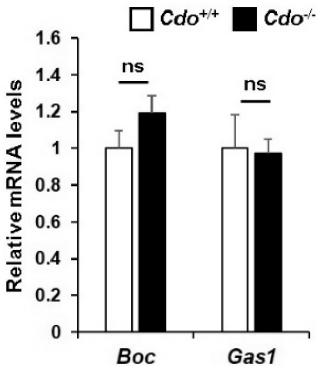

Fig. S3. The expression of *Boc* and *Gas1* was not influenced by Cdo-deficiency. qRT-PCR analysis for *Boc* and *Gas1* in $Cdo^{+/+}$ and $Cdo^{-/-}$ cells at G phase. Each value was normalized to the level of *L-32*, an endogenous control. Data represent means±SEM. ns means not significant (n=3, each).

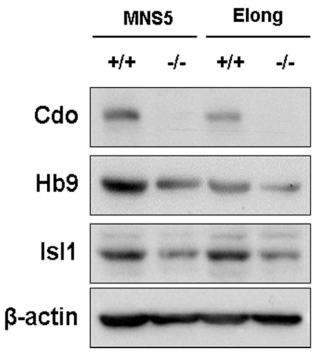

Fig. S4. Cdo deficiency reduced the expression of motor neuron markers. Immunoblot analysis for motor neuronal markers (Hb9 and Isl1) in $Cdo^{+/+}$ and $Cdo^{-/-}$ cells at MNS5 and Elong phases. β-actin was used as a loading control.