

Figure S1. Muscle developmental and lung maturation defects in mice with ablation of *Ctnnb1* in the *Myog-Cre*-expressing cell population. (A) H&E staining of tongue, diaphragm, and hindlimb muscles of newborn (NB) wild-type (WT) and conditional null (cKO) mice. 2nd row is magnification of square in the 1st row. (B) Immunohistochemical staining for MYH1 (Brown) in newborn WT and cKO mice. The nuclei were counterstained with Methylene blue. (C) H&E staining of lungs from NB WT and cKO mice. Scale bars: 200, 50, and 25 μm as indicated in each image.

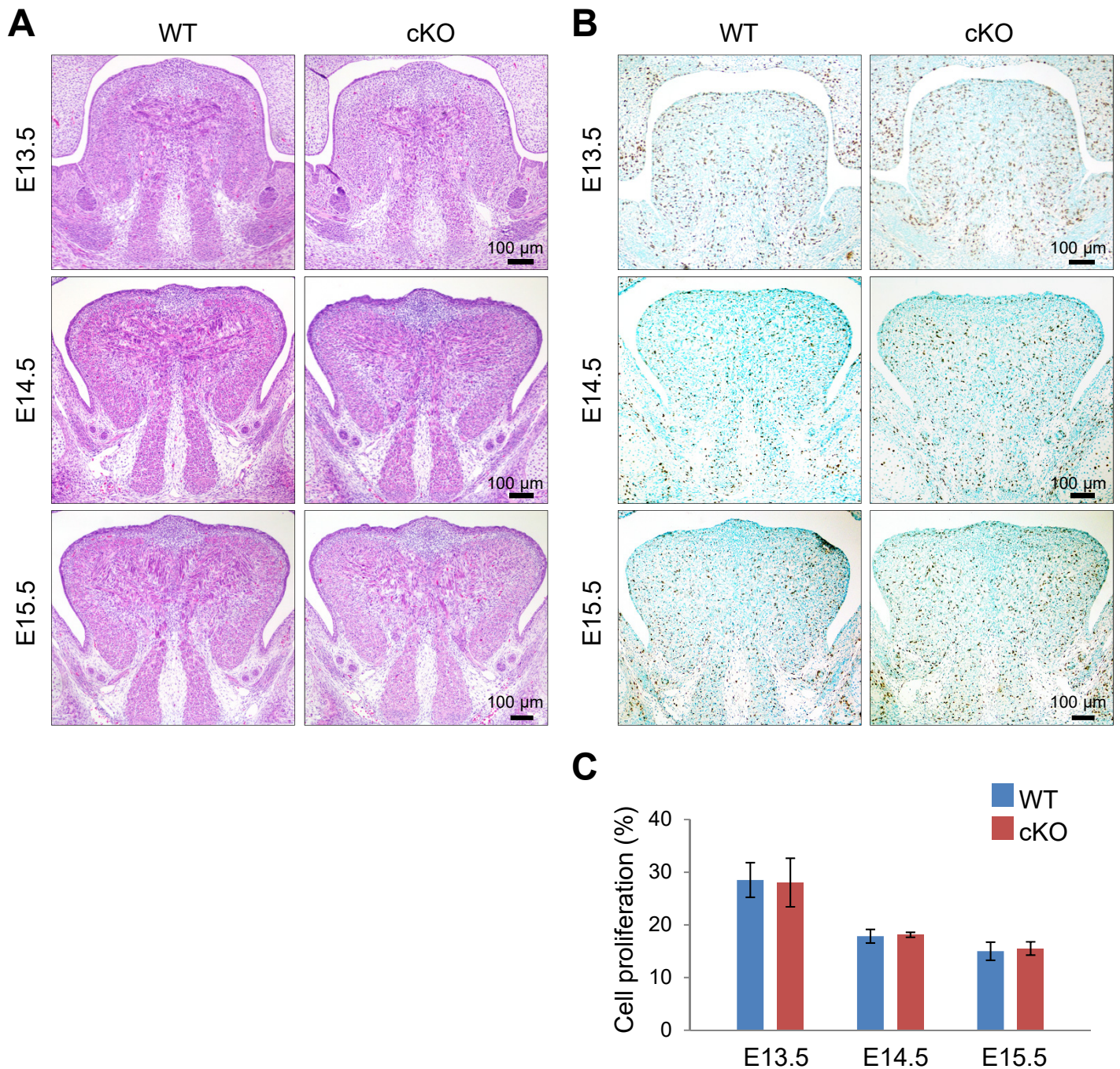


Figure S2. No cell proliferation defects are observed in mice with ablation of *Ctnnb1* in the *Myog-Cre*-expressing cell population. (A) H&E staining of wild-type (WT) and conditional null (cKO) embryos at E13.5, E14.5, and E15.5. Scale bars: 100 μ m. (B) BrdU staining of WT and cKO embryos at E13.5, E14.5, and E15.5. BrdU-positive cells are brown. Nuclei were counterstained with Methylene blue. Scale bars: 100 μ m. (C) Quantification of cell proliferation activity in the tongues from WT (blue bars) and cKO (red bars) embryos at E13.5, E14.5, and E15.5.

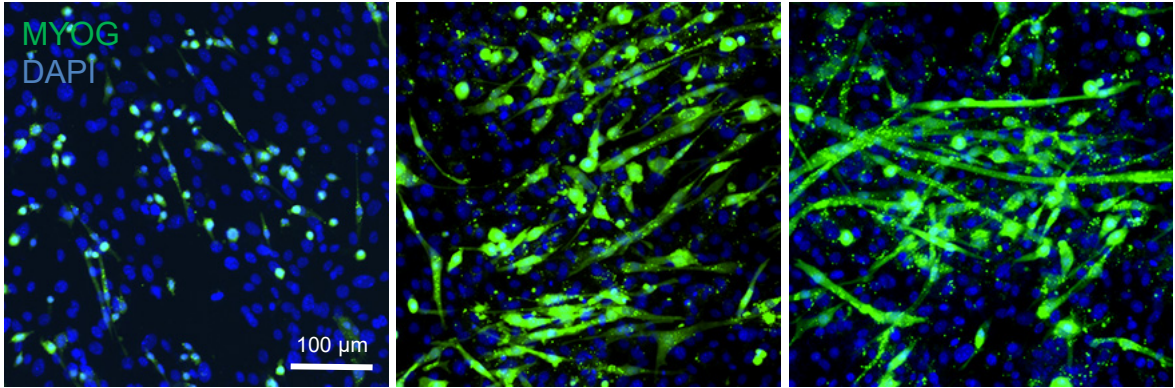
A

Control (*Ctnnb1*^{F/+}; *ZsGreen*^{ckI/ckI}; *Myog-Cre*)

Day 0

Day 3

Day 7

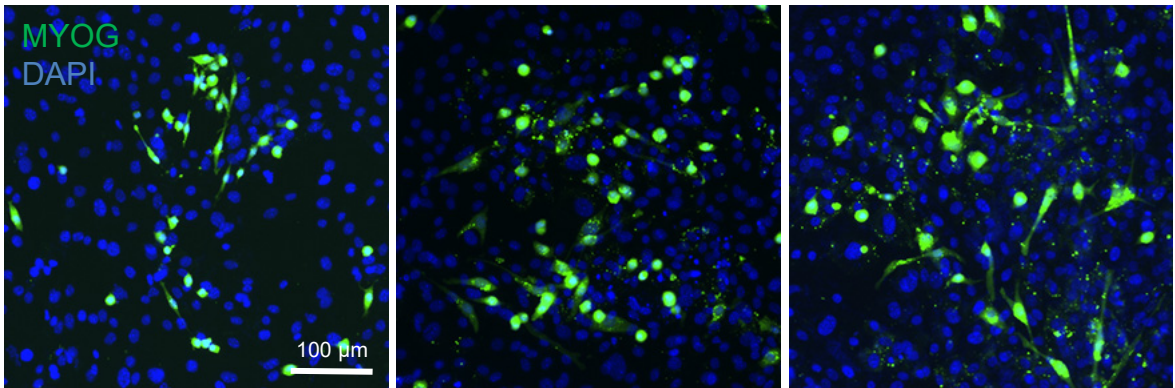


cKO (*Ctnnb1*^{F/F}; *ZsGreen*^{ckI/ckI}; *Myog-Cre*)

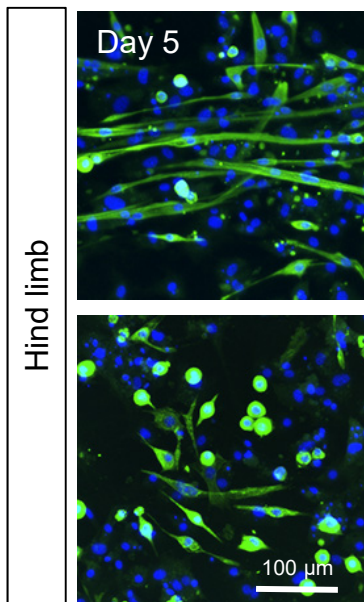
Day 0

Day 3

Day 7



B



Day 5

Hind limb

Control (*Ctnnb1*^{F/+}; *ZsGreen*^{ckI/ckI}; *Myog-Cre*)

cKO (*Ctnnb1*^{F/F}; *ZsGreen*^{ckI/ckI}; *Myog-Cre*)

MYOG/DAPI

Figure S3. Compromised muscle differentiation in *Ctnnb1*^{F/F};Myog-Cre myoblasts. (A) Muscle differentiation assay at the indicated day of culture of cells extracted from *Ctnnb1*^{F/+};ZsGreen^{cKI/cKI};Myog-Cre control and *Ctnnb1*^{F/F};ZsGreen^{cKI/cKI};Myog-Cre conditional knockout (cKO) tongues. (B) Muscle differentiation assay at Day 5 of culture of cells extracted from *Ctnnb1*^{F/+};ZsGreen^{cKI/cKI};Myog-Cre wild-type (WT) control and *Ctnnb1*^{F/F};ZsGreen^{cKI/cKI};Myog-Cre cKO hindlimbs. Myogenin-expressing myoblasts are green. Nuclei were counterstained with DAPI (blue). Scale bars: 100 μm.

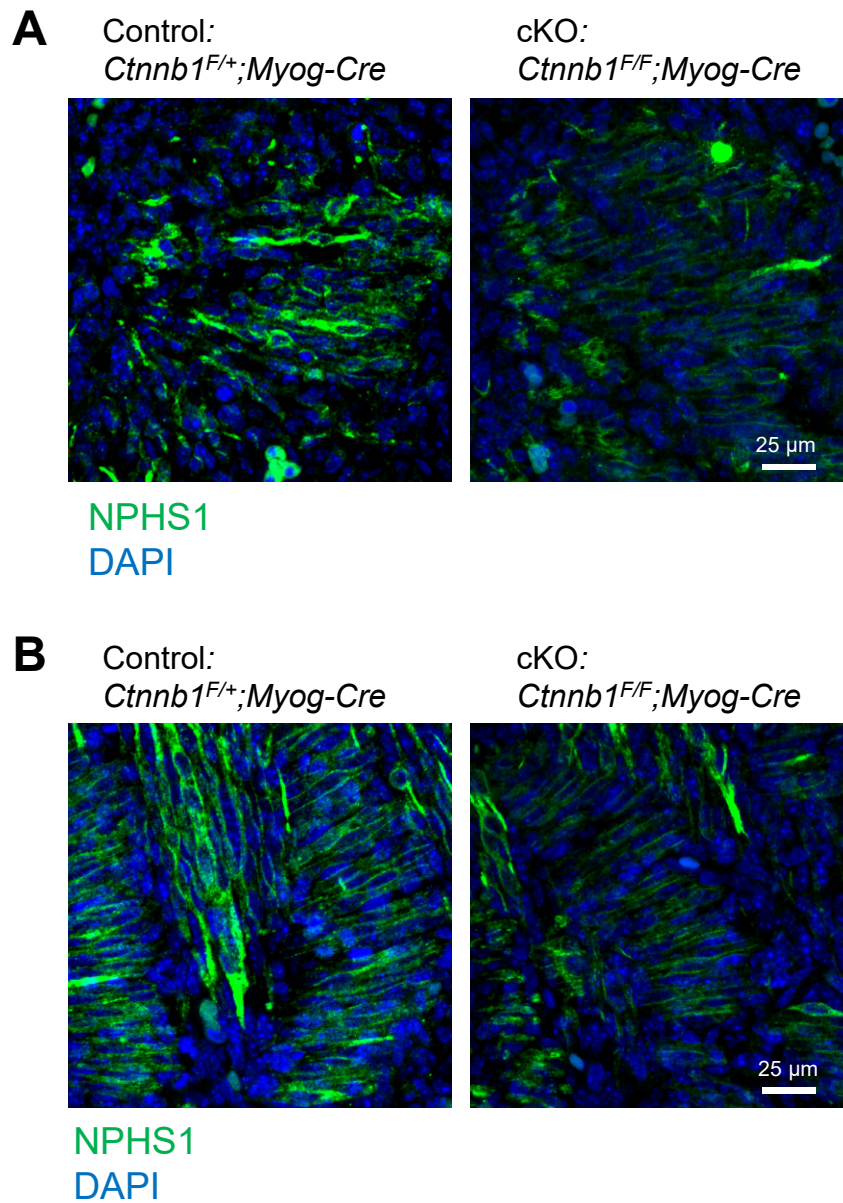


Figure S4. Suppressed NPHS1 expression in *Ctnnb1*^{F/F};Myog-Cre tongue. (A) NPHS1 immunostaining of tongues from *Ctnnb1*^{F/+};Myog-Cre control and *Ctnnb1*^{F/F};Myog-Cre conditional knockout (cKO) mice at E13.5. (B) NPHS1 immunostaining of tongues from *Ctnnb1*^{F/+};Myog-Cre control and *Ctnnb1*^{F/F};Myog-Cre cKO mice at E14.5. *Nphs1*-expressing myoblasts are green. Nuclei were counterstained with DAPI (blue). Scale bars: 25 µm

Mouse	AATCGCATCTCTT	CAAAG	GCAATTAGTTTAA	AACTCAGGATTCCCAAAGATTGTCAGGAG
Rat	AATCACACCTCTT	CAAAG	GCAATTATTTTAA	AACTCAGGATTCCCAAATATTCTTGGGAG
Dog	--TTACCCGAGCCCAA---	CAATT	-TTCCAAATTTGAAAACGTCAAACA-----	GAACC
Horse	-ATGGGTCATCCTCAA-----	AGAAGCTAAAAATTCAGGACTCCCAAATGTTTACTTGAG		
Chimpanzee	-GTGGGTCACCCC	CAAAG	--AAGCAGCTCAAAAATCAGGACTCCTAAATGTTTACCCGAG	
Orangutan	-ATGGGTCACCCC	CAAAG	--AAGCAGCTCAAAAATCAGGACTCCTAAATGTTTACCCGAG	
Human	-GTGGGTCACCCC	CAAAG	--AAGCAGCTCAAAAATCAGGACTCCTAAATGTTTACCCGAG	
Macaque	-ATGGGTCACCCC	CAAAG	--AAGCAGCTCAAAAATCAGGACTCCTAAATGTTTACCCAAG	
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Figure S5. Conserved β -catenin binding site in the promoter region of *Nephs1*. Conserved β -catenin binding sites are highlighted in yellow. * The sequence is conserved in all eight species.