

Supplementary Materials: Spatiotemporal Expression of p63 in Mouse Epidermal Commitment

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Table S1. Antibodies used for whole-mount immunohistochemistry.

Primary Antibody	Vendor and Catalog	Dilution
p63	Santa Cruze, sc-8243	1:700
K8	Novus, NB 110-56919	1:1000
K5	Santa Cruze, sc-66836	1:500

Table S2. Primer sequences used for qRT-PCR and RT-PCR.

Gene	Primers
<i>Trp63</i>	Forward: AGACCACGCACAGAATAAGCG
	Reverse: TGGAAAGGACACATCGAAGCTG
<i>Krt8</i>	Forward: CAAGGTGGAAGTCTAGAGTCCCCG
	Reverse: CTCGTACTGGGCACGAACTTC
<i>Krt5</i>	Forward: GGAGATCGCCACCTACAGGA
	Reverse: TCCGTAGCCAGAAGAGACACT
<i>Gapdh</i>	Forward: GTCCGTTGTGGATCTGACCT
	Reverse: CGGGAGATTCTCAGTGTGGT
<i>TAp63</i>	Forward: TGCATGCGGATAACAATCC
	Reverse: GAGGAGCCGTTCTGAATCTG
$\Delta Np63$	Forward: CAAAACCCTGGAAGCAGAAA
	Reverse: GAGGAGCCGTTCTGAATCTG

Table S3. Antibodies used for immunofluorescence staining and immunohistochemistry.

Primary Antibody	Vendor and Catalog	Dilution
p63	Santa Cruze, sc-8243	1:100
$\Delta Np63$	Santa Cruze, sc-8431	1:100
K8	Novus, NB 110-56919	1:100
K14	Millipore, CBL197	1:100

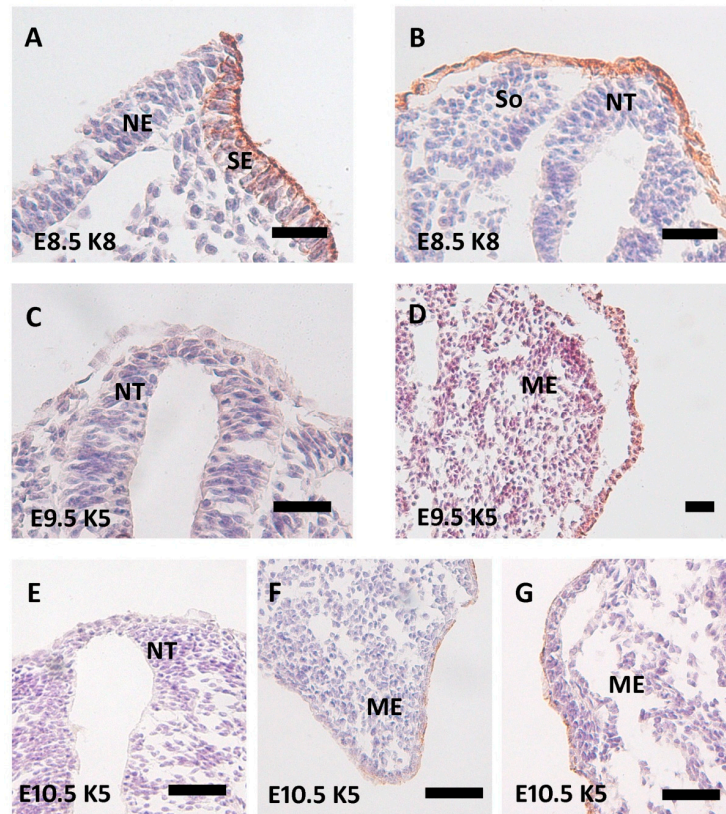


Figure S1. The sections of whole-mount immunohistochemistry embryos. (A,B) K8 expression in E8.5 embryos ((A) head field; (B) dorsal trunk containing a somite); (C,D) K5 expression in E9.5 embryos ((C) dorsal trunk containing the neural tube; (D) forelimb bud); (E–G) K5 expression in ((E) 10.5 embryos , neural tube; (F) forelimb bud; (G) posterior trunk containing a somite). NE, neural ectoderm; NT, neural tube; ME, mesenchyme; So, somite; SE, surface ectoderm. Bar = 50 μ m.

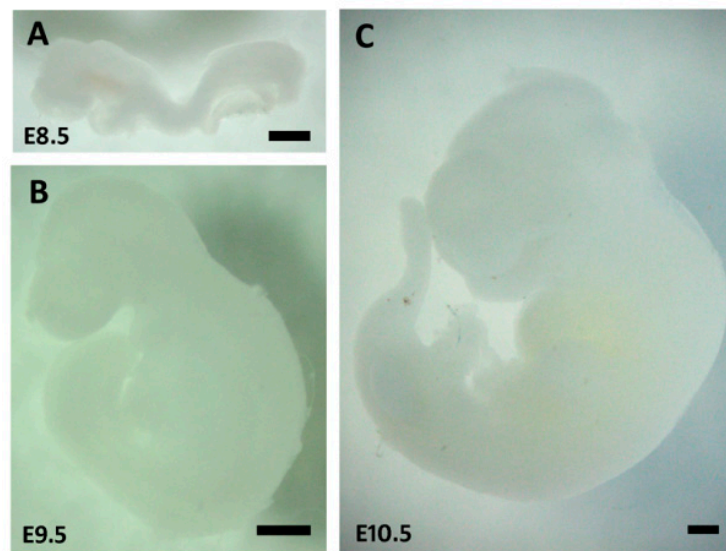


Figure S2. Negative controls for whole-mount immunohistochemistry embryos. (A) E8.5; (B) E9.5; (C) E10.5. Bar = 500 μ m.

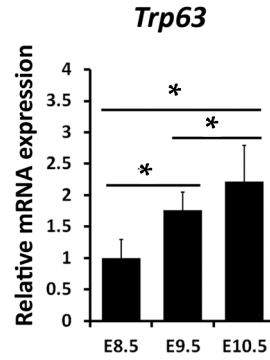


Figure S3. *Trp63* mRNA expression in E8.5–E10.5 embryos by qRT-PCR. * $p < 0.05$.

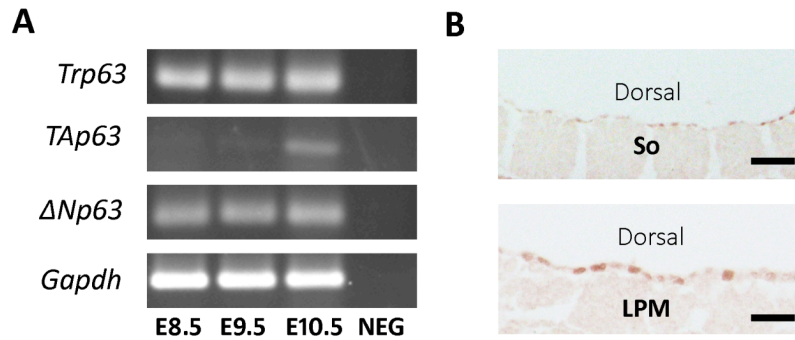


Figure S4. The expression of p63 isoforms in mouse embryos. (A) RT-PCR to examine the expression of *Trp63*, *TAp63* and *ΔNp63* in E8.5–E10.5 embryos; (B) *ΔNp63* expression in surface ectoderm cells covering the newly formed somites (So) and lateral plate mesenchyme (LPM) at E8.5, NEG represented negative control. Bar = 50 μm .

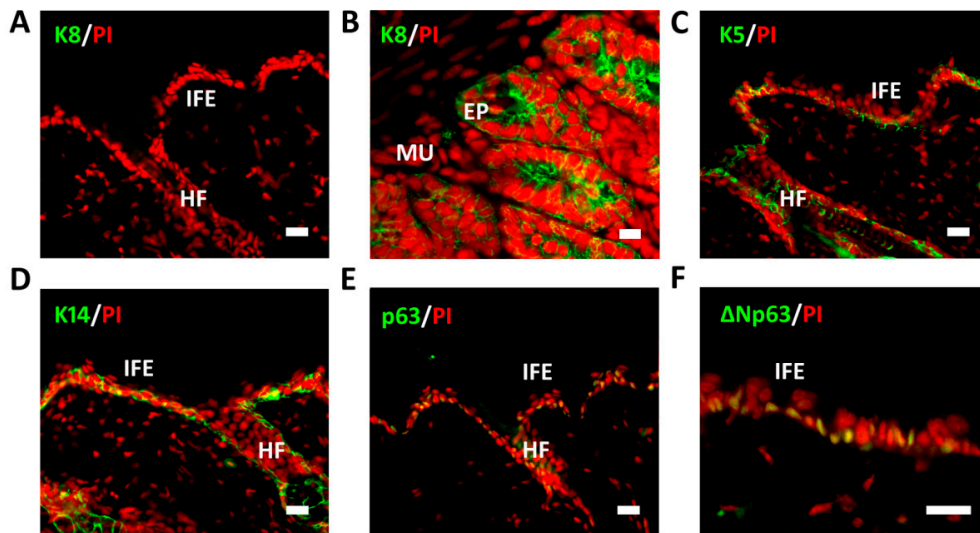


Figure S5. Verification of antibodies by immunofluorescence staining. (A) K8 (green) wasn't expressed in the mature mouse skin; (B) K8 (green) was specific expressed in the cytoplasm of mouse intestinal epithelial cells; (C,D) K5 (green) and K14 (green) were expressed in the cytoplasm of the basal layer cells in mature mouse skin; (E,F) p63 (green) and ΔNp63 (green) were expressed in the basal layer cell nuclei in mature mouse skin. PI was used to indicate the nuclei. HF, hair follicle; IFE, interfollicular epidermis; MU, mucosa; EP, epithelium. Bar = 20 μm .