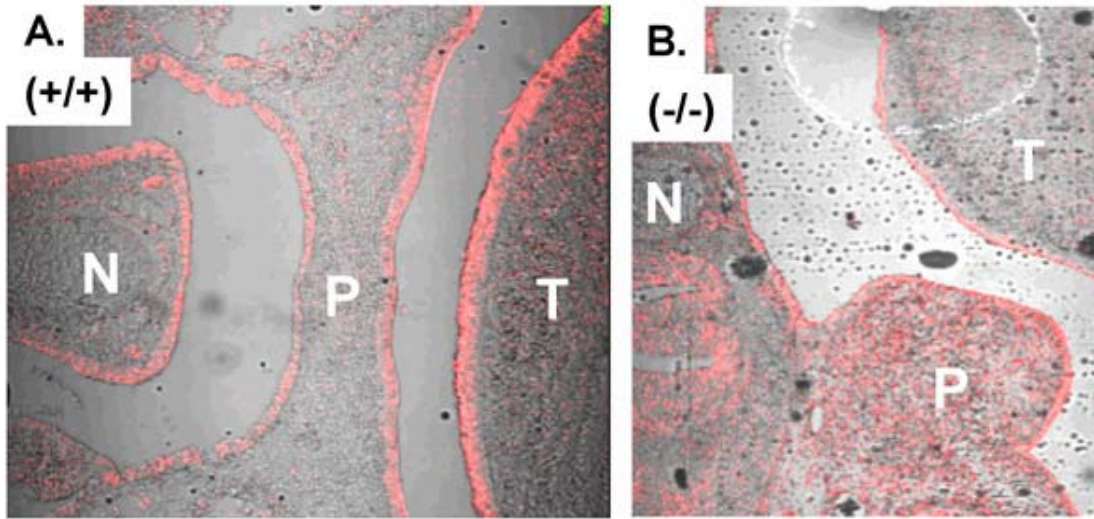
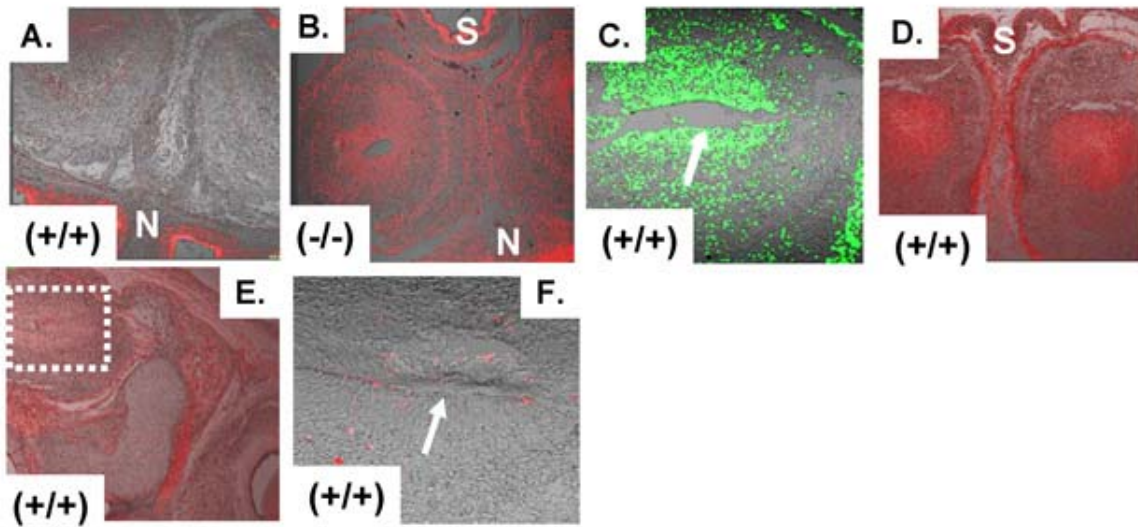


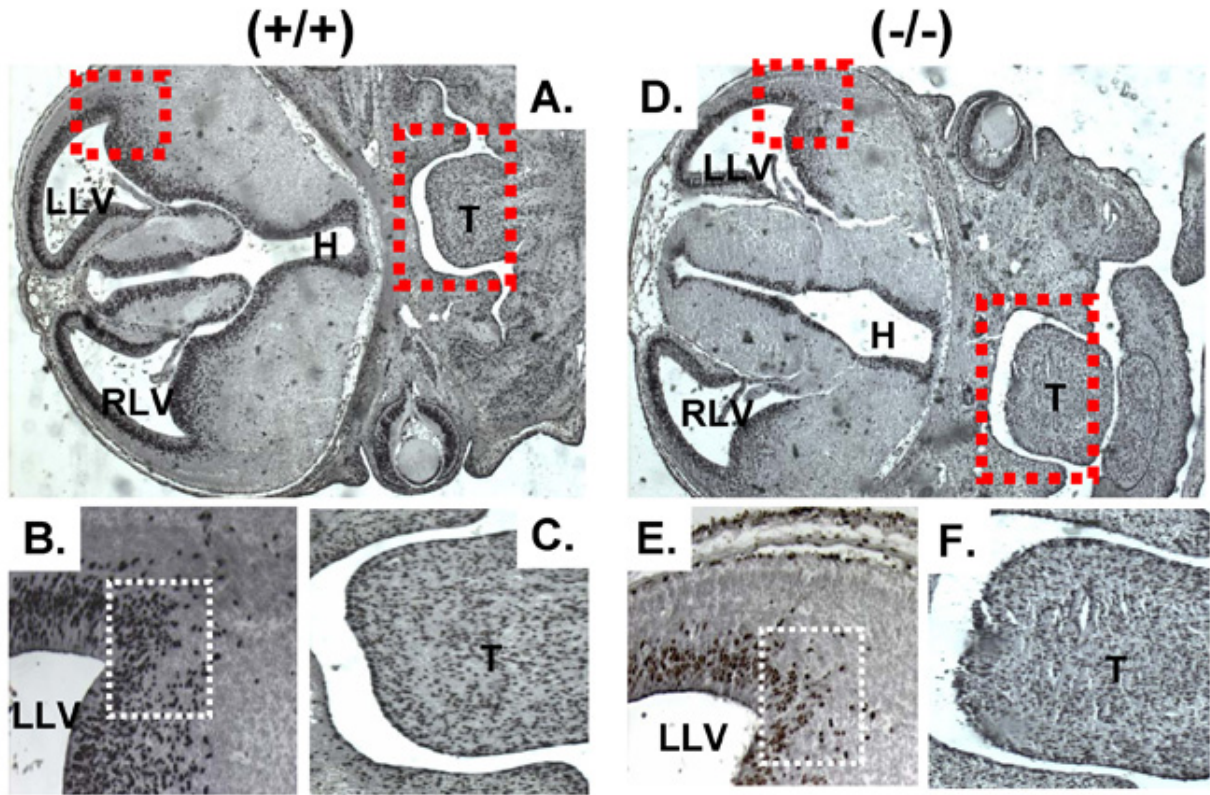
**Fig. S1. Vimentin expression in the tongue does not change with *Zeb1* mutation.** (A,B) Vimentin immunostaining in the tongue of wild-type and *Zeb1*-null mice. (C,D) Co-localization of vimentin (C) and Zeb1 (D) in the tongue. E16.5.



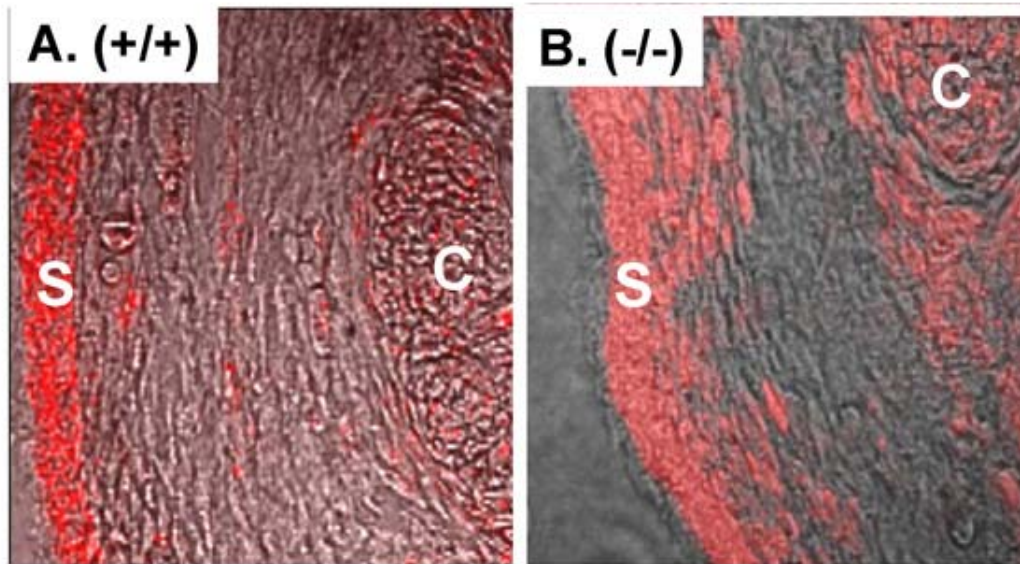
**Fig. S2. E-cadherin expression expands to palatal mesenchyme with ZEB1 mutation. (A,B)** E-cadherin expression remains on the tongue epithelium with *Zeb1* mutation, but it does not expand to mesenchyme in the tongue. N, forming nasal cartilage; P, palatal mesenchyme; T, tongue. E16.5.



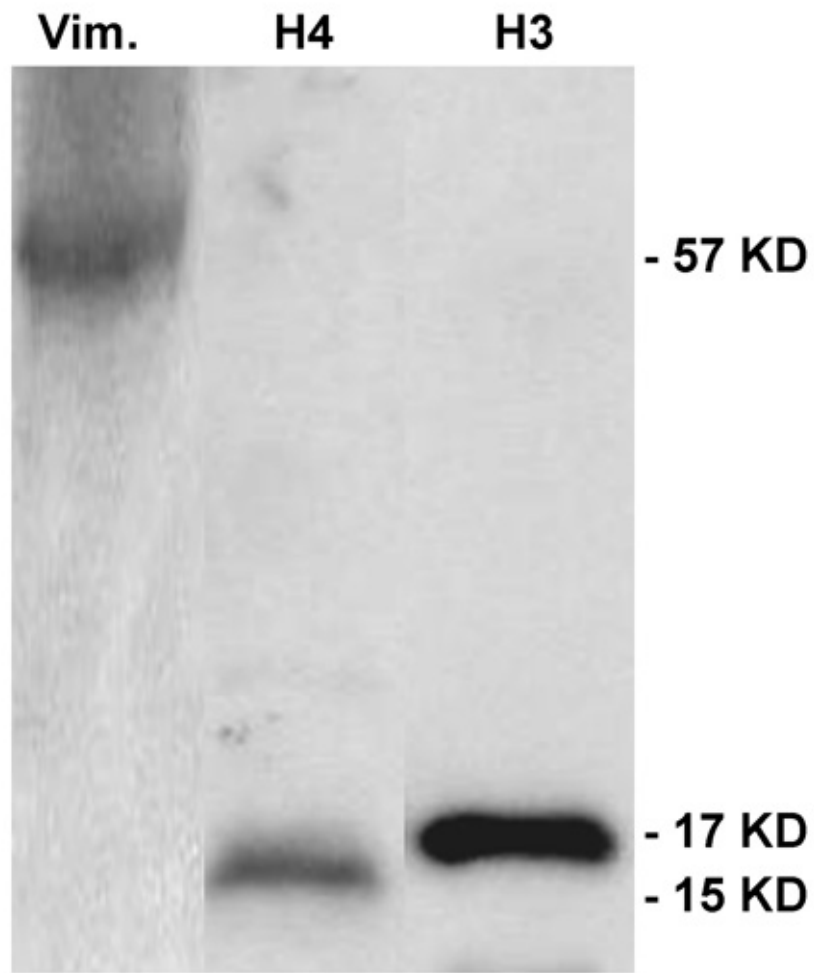
**Fig. S3. Mutation of *Zeb1* leads to ectopic expression of E-cadherin and loss of vimentin expression in the olfactory lobe. (A,B) E-cadherin immunostaining. (C) Zeb1. (D-F) Vimentin. Arrows in C and F indicate similar locations. (F) A higher magnification view of the boxed region in E.**



**Fig. S4. Immunostaining for BrdU.** (A,D) Representative low-magnification views of embryos at E15.5 immunostained for BrdU. (B,C,E,F) Higher magnification of the boxed regions from A and D. Boxed regions in B and E are representative regions counted for quantification of BrdU incorporation in Fig. 4M. LLV, left lateral ventricle; RLV, right lateral ventricle; H, hypothalamus; T, tongue.



**Fig. S5. p15Ink4b expression.** (A,B) p15Ink4b expression is similar in the skin of wild-type and *Zeb1*-null mice. However, expression is evident within and surrounding developing cartilage in the null mice. C, cartilage; S, skin.



**Fig. S6.** Western blot analysis of 40 µg of protein from MEFs. 15% SDS gel. Antibodies were diluted 1:1000.