

Supplementary Data Figure Legend

Figure S1. Dynamic expression of *Etv5* during rugae maturation. **(A)** Whole mount expression of *Etv5* in an E14.5 wildtype palatal shelf viewed looking dorsally (anterior to the right, lateral to the top) **(B and C)** The same palatal shelf viewed sagittally toward the cheek to facilitate identification of the raised morphology of rugae (anterior to the right, dorsal to the top). *Etv5* is strongly expressed in R1 and the nascent ruga (asterisk) and is absent from the most recently formed inter-rugae domain at the anterior edge of the RGZ. In progressively anterior (and older) rugae, *Etv5* expression is downregulated and expands to the adjacent inter-rugae domains (arrowheads). This data indicates that the induction and maturation of rugae is accompanied by a dynamic series of directional intercellular signaling interactions in the palatal mesenchyme and epithelium.

