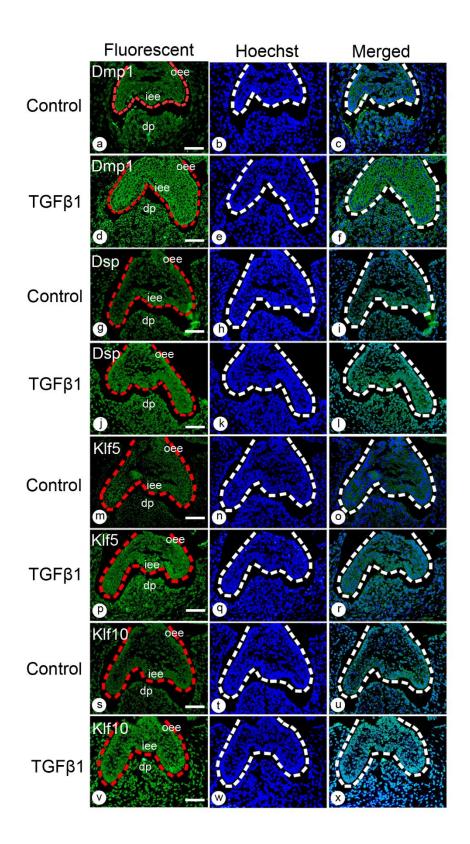


Supplemental Fig. 1

Expression of Klf10 and PCNA during tooth development. Expression pattern of Klf10 and PCNA in developing teeth from embryonic day (E) 12.5 to postnatal day (PN) 20. At E12.5, the expression of PCNA (**f**) and Klf10 (**k**) is seen in dental epithelium and the underlying mesenchyme. At E16.5, both PCNA (**g**) and Klf10 (**l**) are expressed in the secondary enamel knot, inner and outer enamel epithelia, stratum intermedium and dental mesenchymal cells beneath the inner enamel epithelia. At PN2, positive PCNA (**h**) and Klf10 (**m**) staining appears in differentiating ameloblasts and odontoblasts. At PN10 and PN20, PCNA (**i**, **j**) and Klf10 (**n**, **o**) are expressed in ameloblasts and odontoblasts. **a-e**Bright-field morphology. **p-t** Tissue sections were stained with Hoechst to reveal the nucleus. **u-y** Images were merged (*Am* ameloblasts, *D* dentin, *de* dental epithelia, *dp* dental pulp, *E* enamel, *od* odontoblasts). *Bar* 50 μM. (GIF 383 kb)



Supplemental Fig. 2

TGF-β1 effect of expression of Klf5, Klf10, Dmp1 and Dspp genes. Mandibles isolated from E14.5 were treated either with or without 10 ng/ml TGF-β1 in DMEM supplemented with 0.5 % FBS, 10 U/ml penicillin and 100 mg/ml streptomycin at 37°C for 2 days. Tissue sections were immunostained with Klf5, Klf10, Dmp1 and Dspp antibodies, respectively. Fluorescent immunohistochemistry showed that TGF-β1 induces expression of Klf5, Klf10, Dmp1 and Dspp genes in dental epithelial and mesenchymal cells (**d**, **j**, **p**, **v**) compared with that of the control groups (**a**, **g**, **m**, **s**). **b**, **e**, **h**, **k**, **n**, **q**,**t**, **w** Tissue sections were stained with Hoechst to reveal the nucleus. **c**, **f**, **i**, **l**, **o**, **r**, **u**, **x** Images were merged. *Bar*50 μM. (GIF 375 kb)