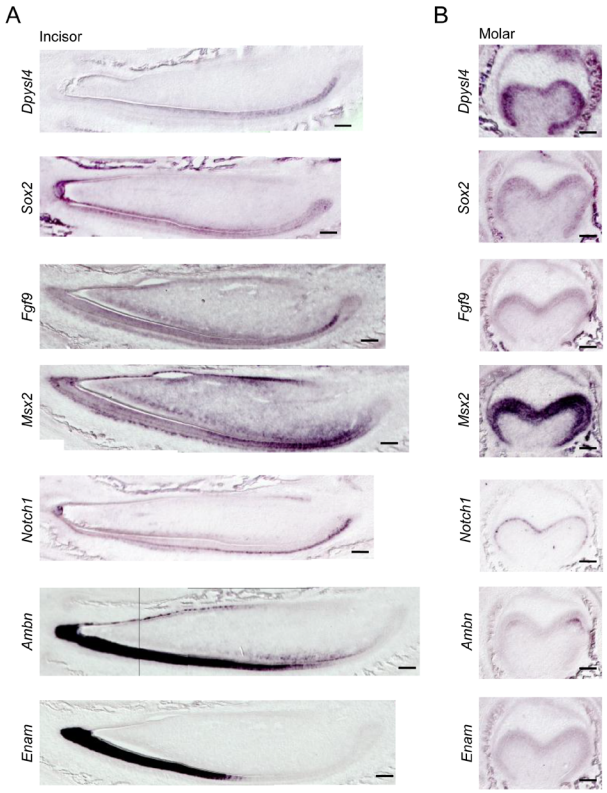
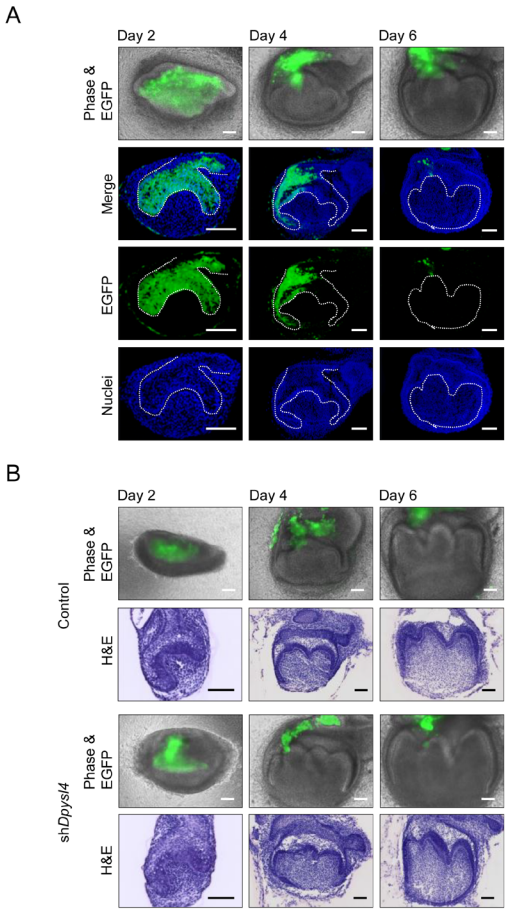


Supplemental Fig. S1. Expression patterns of ameloblast linage marker genes.
In situ hybridization analysis of *Dpysl4* (top row), *Sox2* (second row), *Fgf9* (third row), *Msx2* (fourth row), *Notch1* (fifth row), *Ambn* (sixth row) and *Enam* (seventh row) expression profiles in incisor (A) and molar (B) germs at ED18.5 are shown. Scale bar, 100 μm.



Supplemental Fig. S2. Expression areas of shRNA and development of shRNA-expressing molar germs during *in vitro* organ culture.

(A) Analyses of EGFP fluorescence (green) were shown. The EGFP-expression adenovirus infected molar germs developed in organ culture for 2, 4 or 6 days. EGFP fluorescence was merged in phase-contrast images (top row) and fluorescent microscopy (second, third and fourth row) of the infected molar germs of frontal (Day 2) or sagittal (Day 4 and Day 6) sections were shown. The nuclei were stained using Hoechst33342 (blue). White dotted lines indicated the boundaries between the epithelium and mesenchyme. (B) Representative images of the control (upper) and sh*Dpysl4* (lower) infected molar germs developed in organ culture. The infected molar germs were cultured for 2 days, 4 days and 6 days. EGFP fluorescence (green) are merged in phase-contrast images (first and third rows) and histological analysis (H&E) (second and forth rows) of the control or sh*Dpysl4* infected molar germ were shown. Scale bar, 100 μm.