Mitochondria modulate ameloblast Ca^{2+} signaling

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SUPPLEMENTARY MATERIALS:

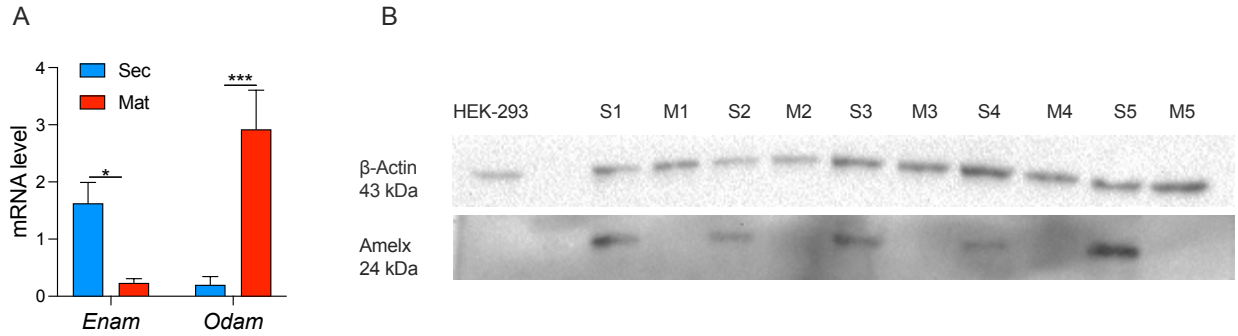

Figure S1: Secretory and maturation stage sample purity. A) mRNA levels of *Enam* (a marker for secretory stage) and *Odam* (Odam) (a marker for maturation stage) were quantified by RT-qPCR (n = 6 animals). Data were analyzed by one-way ANOVA and 2 - tailed unpaired Student's t test. *P < 0.05, ***P < 0.001. **B)** Western blot analysis for the enamel specific protein AMELX that is highly expressed in secretory ameloblasts. HEK-293 cells were used as negative control as they do not express AMELX. (n = 12 animals).

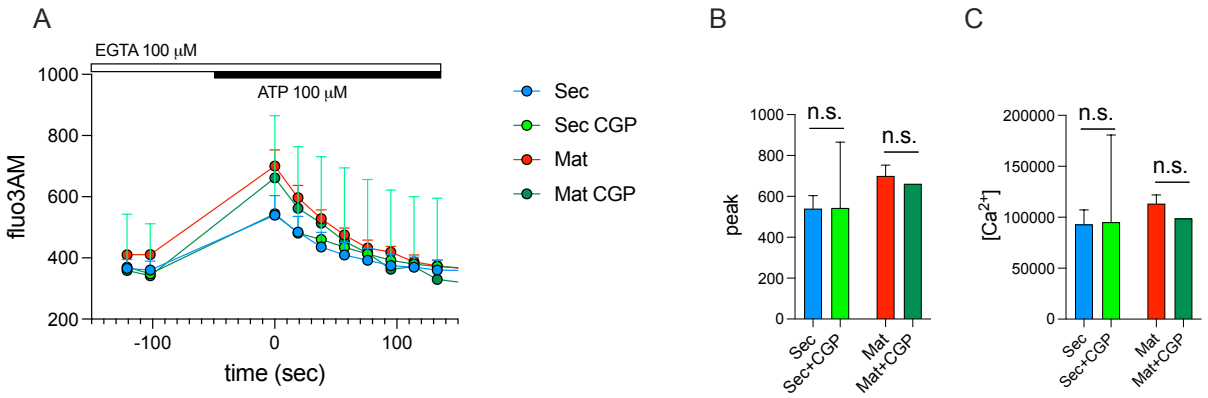

Figure S2: The NCLX inhibitor CGP-37157 does not alter the cytosolic Ca^{2+} level in enamel cells. A) Original traces showing cytosolic Ca^{2+} level in secretory and maturation stage ameloblasts loaded with the cytosolic Ca^{2+} indicator fluo3AM (1 µM) in the presence/absence of the NCLX inhibitor CGP-37157 (10 µM). **B-C)** Quantification of the Ca^{2+} peak and area under the curve. Data represent the mean ± SEM of 3 independent experiments (n = 4 animals), 4 wells for each condition with 20-50 cells per field. Data were analyzed by one-way ANOVA. n.s., non-significant.