

Supplementary data

Loss of KDM4B impairs osteogenic differentiation of OMSCs and promotes Oral Bone Aging

Running title: KDM4B controls oral bone aging

Fig. S1 Osteogenic and adipogenic differentiation potentials of BMSCs and OMSCs *in vitro*.

a ALP staining of BMSCs and OMSCs undergone osteogenic induction. Scale bar, 8 mm.

n = 3.

b Quantitative ALP activity assay of BMSCs and OMSCs upon osteogenic induction. *n* = 3.

c ARS staining of BMSCs and OMSCs undergone osteogenic induction. Scale bar, 8 mm.

n = 3.

d Quantification of calcium deposit in ECM of ARS staining of **c**. *n* = 3.

e Expression of osteogenic marker genes *Col1a1*, *Ibsp*, *Runx2*, *Sp7* and *Bglap* in BMSCs and OMSCs upon osteogenic induction. **P* < 0.05; ***P* < 0.01. *n* = 3.

f-g Oil Red O staining of BMSCs and OMSCs upon adipogenic induction. Scale bar, 100 μ m. *n* = 3.

h qRT-PCR analysis of the expression of adipogenic marker genes *CD36*, *Cebpa*, *Fabp4*, and *Pparg* in BMSCs and OMSCs upon adipogenic induction. ***P* < 0.01. *n* = 3.

Fig. S1

