



Suppl. Fig. 1. The positive and negative control groups for the lineage tracing mouse models. **(A-D)** Tie2-Cre/Lacz^{flox/flox} (positive control): vascular tissue of mandibular bone marrow cavity which showed obvious β-gal expressed by Lacz but little Sox9, scale bar: 50μm. **(E-H)** Tie2-Cre/Lacz^{flox/flox} (negative control): condylar cartilage of mandibular bone which has no vascular tissue and showed obvious Sox9 but little β-gal expressed by Lacz, scale bar: 25μm. **(I-L)** Ckmm-Cre/Lacz^{flox/flox} (positive control): muscular tissue around condyle which showed obvious β-gal expressed by Lacz but little Sox9, scale bar: 25μm. **(M-P)** Ckmm-Cre/Lacz^{flox/flox} (negative control): condylar cartilage of mandibular bone which has no muscular tissue and showed obvious Sox9 but little β-gal expressed by Lacz, scale bar: 50μm.