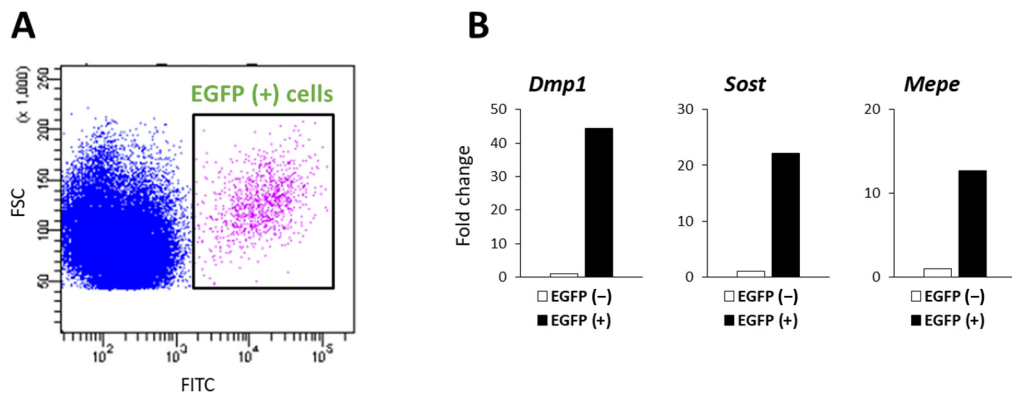
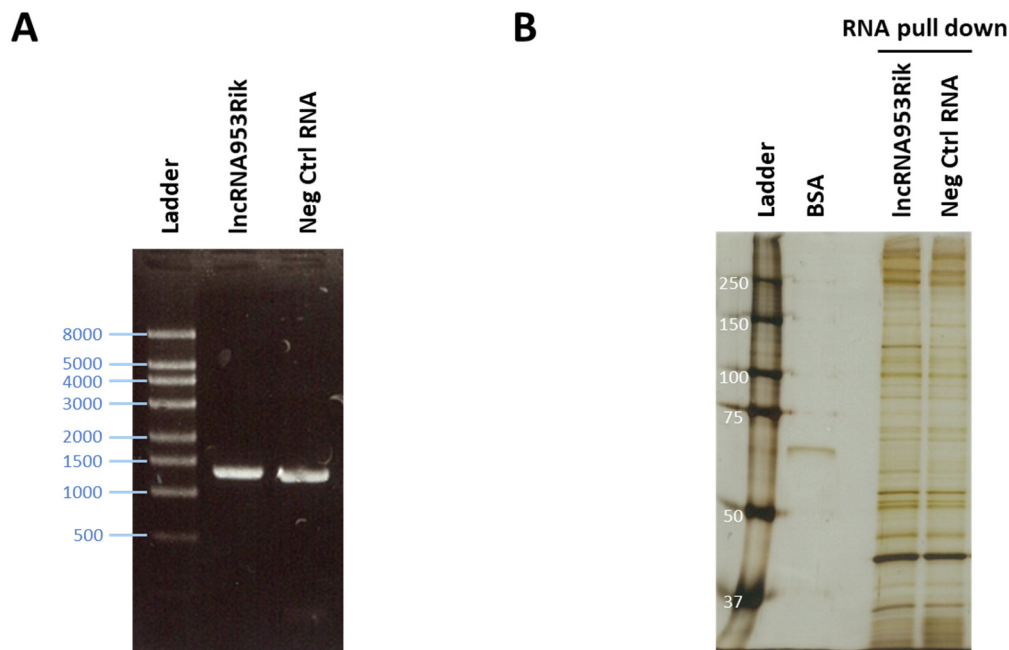


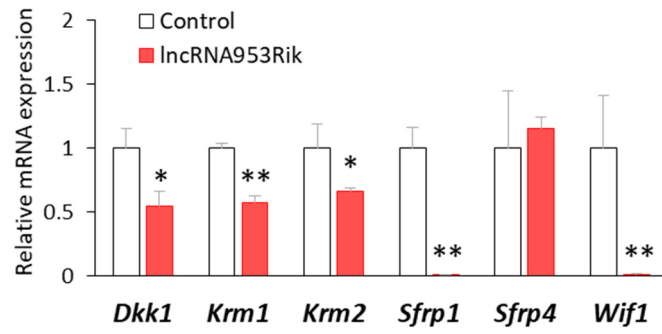
Supplementary Materials



**Supplementary Figure S1.** Confirmation of the isolation of osteocytes. (A) Scatter plot of the cells derived from femurs of *Dmp1*-Cre;*CAG-CAT-EGFP* *tg* mice. These cells were analyzed by RNA-seq and the related heatmap is shown in Figure 1A. (B) Expression of osteocyte marker genes in RNA-seq samples.



**Supplementary Figure S2.** RNA pull-down using in vitro-transcribed IncRNA953Rik. (A) Agarose gel electrophoresis of in vitro-transcribed IncRNA953Rik or a negative control RNA of the same length. These RNAs were used for the RNA pull-down assay. (B) In vitro-transcribed IncRNA953Rik or the negative control RNA was incubated with whole-cell lysates from IDG-SW3 cells. After pull-down of each RNA, the samples were separated by SDS-PAGE, and the gels were subjected to silver staining. BSA, bovine serum albumin (66 kDa).



**Supplementary Figure S3.** Expression of Wnt/ $\beta$ -catenin signaling inhibitors. The expression of representative genes of Wnt/ $\beta$ -catenin signaling inhibitors was analyzed by qPCR in the absence of differentiation. The indicated mRNA expression levels were normalized to the level of *Gapdh*. Error bars, SDs;  $n = 3$ ;  $t$  test; \*,  $p < 0.05$ ; \*\*,  $p < 0.01$  versus control.