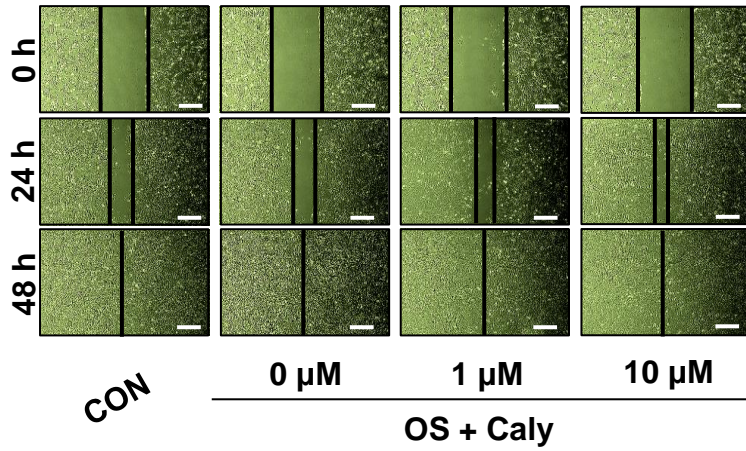


Supplementary Figure Legends

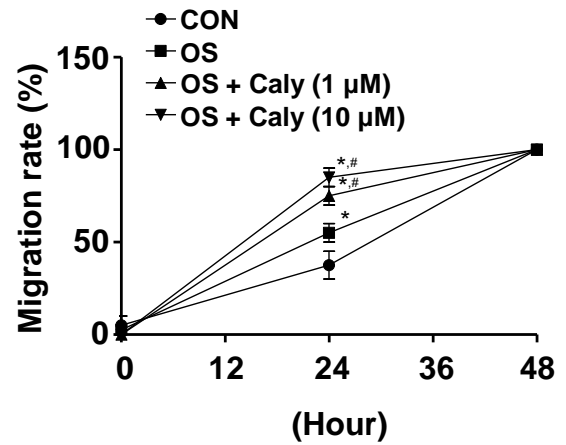
Supplementary Figure 1. Effects of Caly on the osteogenesis of pre-osteoblasts committed to the osteoblast lineages. **(A)** Cell migration was measured by the Wound healing assay. The migrated cells were visualized under a light microscope. Scale bar: 100 μm . **(B)** The line graph shows migration rate (%) normalized to the control. **(C)** The ALP staining was observed at 7 days using a scanner (upper) and colorimetric detector (middle). ALP-positively expressing cells were visualized under a light microscope (bottom). Scale bar: 50 μm . **(D)** ALP activity was quantitatively measured at 7 days using a spectrophotometer. Data are expressed as the mean \pm S.E.M. from three separate experiments (* $p < 0.05$ compared to the control, and # $p < 0.05$ compared to OS).

Supplementary Figure 2. Effects of Caly on the RUNX2 expression of pre-osteoblasts committed to the osteoblast lineages. **(A)** RUNX2 and β -actin expressions were analyzed using western blot analysis at 2 days. The bar graph shows relative RUNX2 level (%) normalized to the control (left). **(B)** RUNX2 expression in nucleus was measured at 2 days using immunofluorescence. RUNX2 (red color), nuclear marker DAPI (blue color), Merged (purple color). Scale bar: 50 μm . Data are expressed as the mean \pm S.E.M. from three separate experiments (* $p < 0.05$ compared to the control, and # $p < 0.05$ compared to OS).

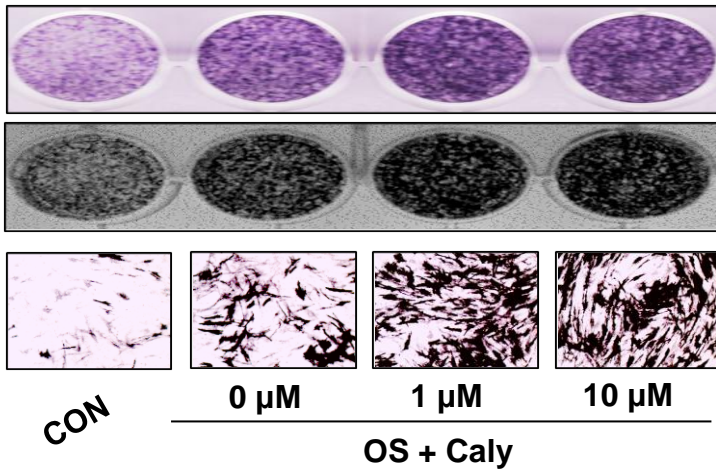
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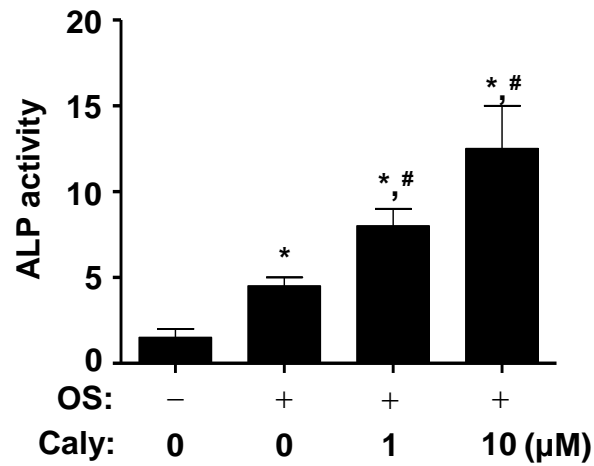
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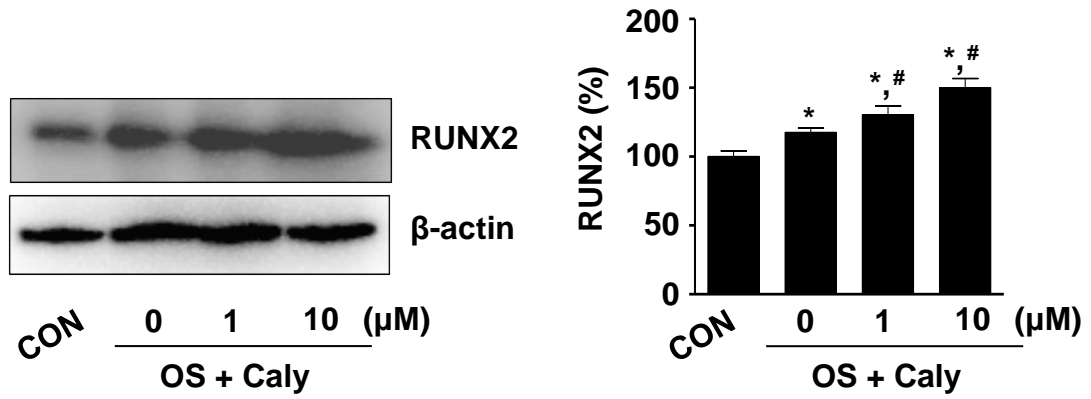
C



D



A



B

