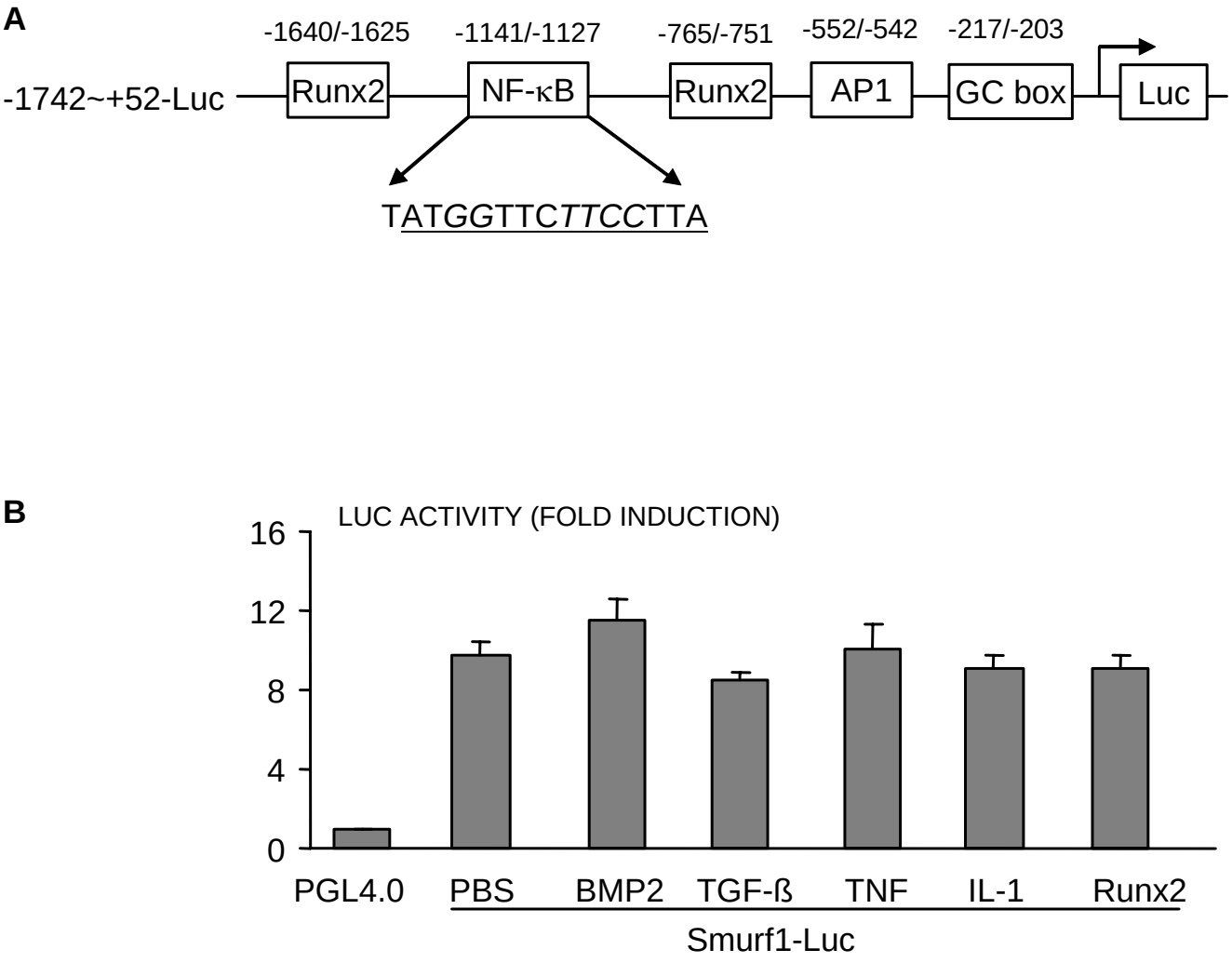
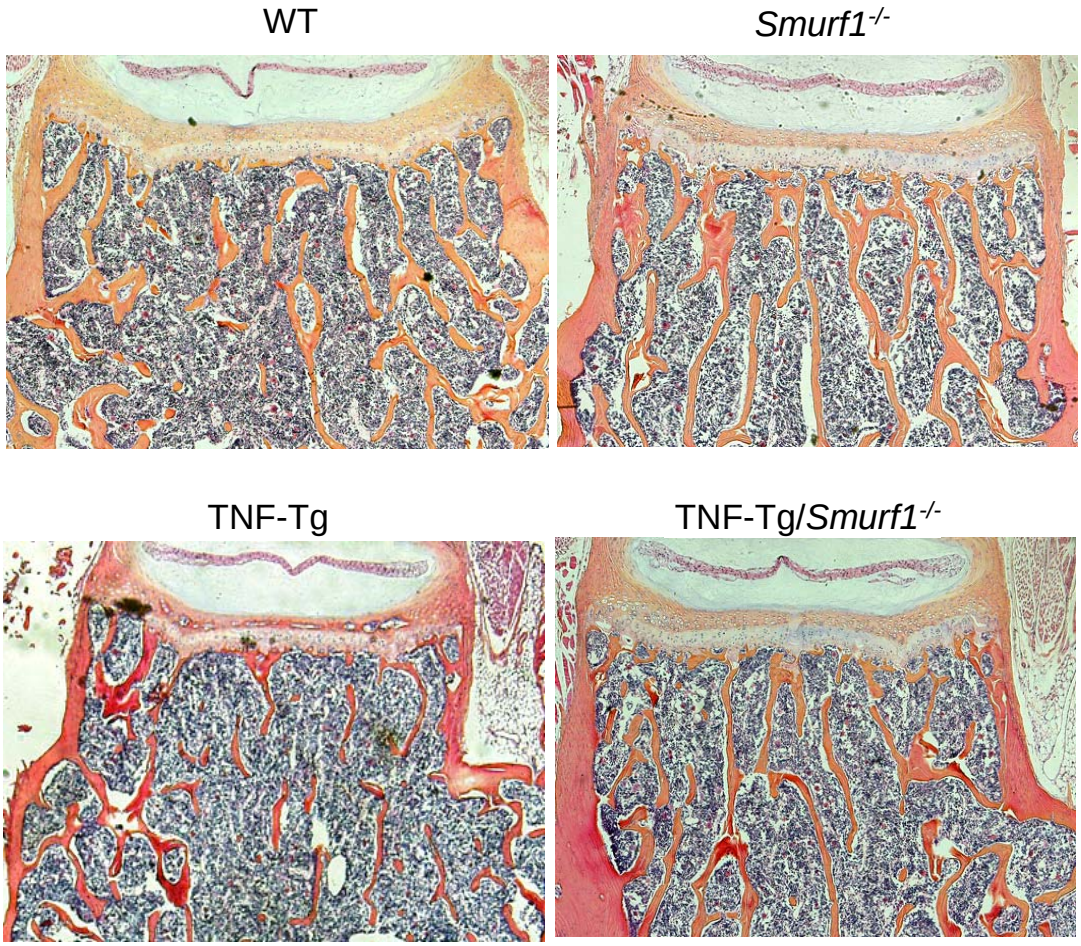
Supplemental data 1



Smurf1 promoter is not stimulated by inflammatory cytokines in 2T3 pre-osteoblasts. (A) A schematic presentation of the mouse Smurf1 promoter reporter. A putative NF-κB binding site is shown underneath and the core sequence for NF-κB binding are indicated in Italian. (B) 2T3 cells were transiently transfected with PGL4.0-Smurfl1.8Kb plasmid and treated with 100ng/ml BMP-2 (100 ng/ml), TGF-ß (10ng/ml), TNF (10 ng/ml), IL-1 (10 ng/ml), or co-transfected with Runx2 expression vector for 48 hours. A luciferase assay was conducted. Values are the mean plus SD of 3 different wells. The experiment was repeated once with a similar result.

Supplemental data 2



TNF-induced systemic bone loss is prevented in TNF-Tg/*Smurf1-/-* mice. Lumber 4 vertebral bodies were isolated from 7.5-month-old WT, *Smurf1-/-*, TNF-Tg, TNF-Tg/*Smurf1-/-* mice and subjected to histology examination. Representative pictures of H&E-stained sections (power 40) show thinner and fewer trabecular bones in TNF-Tg mice, which is recovered in TNF-Tg/*Smurf1-/-* mice.