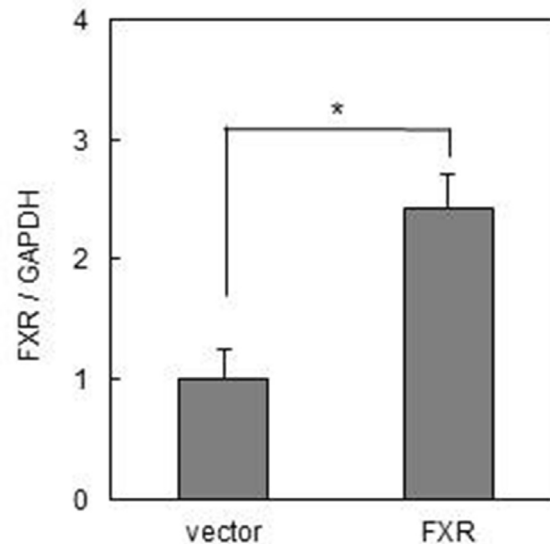
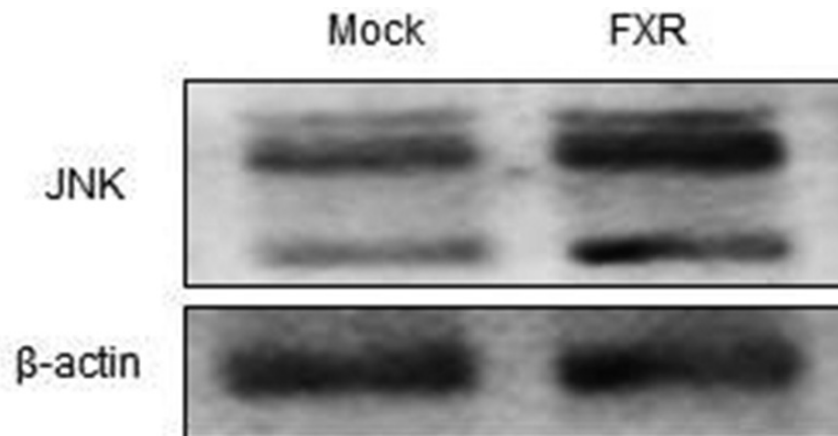


The farnesoid X receptor negatively regulates osteoclastogenesis in bone remodeling and pathological bone loss

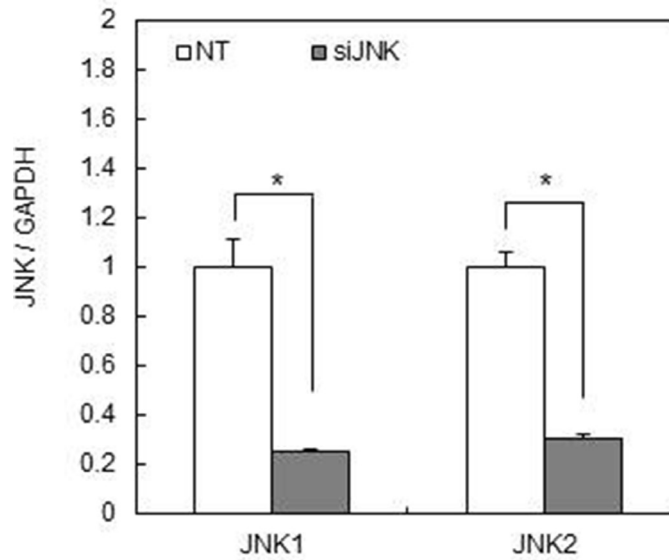
SUPPLEMENTARY MATERIALS



Supplementary Figure 1: Overexpression of farnesoid X receptor (FXR) in FXR^{+/+} bone marrow-derived macrophages (BMMs). BMMs were infected through a retrovirus packaging system. The mRNA expression of FXR in infected BMMs was analyzed by real-time PCR. * $p < 0.05$



Supplementary Figure 2: Modulation of JNK1/2 expression levels by overexpression of FXR. BMMs were infected by mock or FXR through a retrovirus packaging system. The protein expression of JNK1/2 in infected BMMs was analyzed by western blotting.



Supplementary Figure 3: The JNK1/2 mRNA levels by knockdown of JNK. The mRNA expression level of JNK1/2 in siRNA-transfected BMMs was analyzed by real-time PCR. * $p < 0.05$

Supplementary Table 1: Mouse genes primers used for real-time PCR analysis

Mouse genes	primer sequences
FXR	5'-TGT GAG GGC TGC AAA GGT TT-3' 5'-ACA TCC CCA TCT CTC TGC AC-3'
JNK1	5'-TGC CAT CAT GAG CAG AAG CAA ACG-3' 5'-TCT GAT TCT GAA ATG GCC GGC TGA-3'
JNK2	5'-GTG GCG GAC TCA ACT TTC ACT GTT-3' 5'-TCT CTT TGC GTG CGT TTG GTT CTG-3'
PPAR γ	5'-TGC TGT TAT GGG TGA AAC TCT GGG-3' 5'-GGCTTGATGTCAAAGGAATGCG-3'
PGC-1 β	5'-TACATGCATACCTACTGCCTGCCT-3' 5'-TTGGGCCAGAAGTTCCTTAGGAT-3'
JAK3	5'-TTA CAA AGCCTGTCTGCCG-3' 5'-TCCAGGAGATGCCGTTGTC-3'
IFN- β	5'-CTGGCTTCCATCATGAACAA-3' 5'-CATTTCGAATGTTTCGTCCT-3'
GAPDH	5'-TGCACCACCAACTGCTTATTAGC-3' 5'-GGCATGGACTGTGGTCATGAG-3'