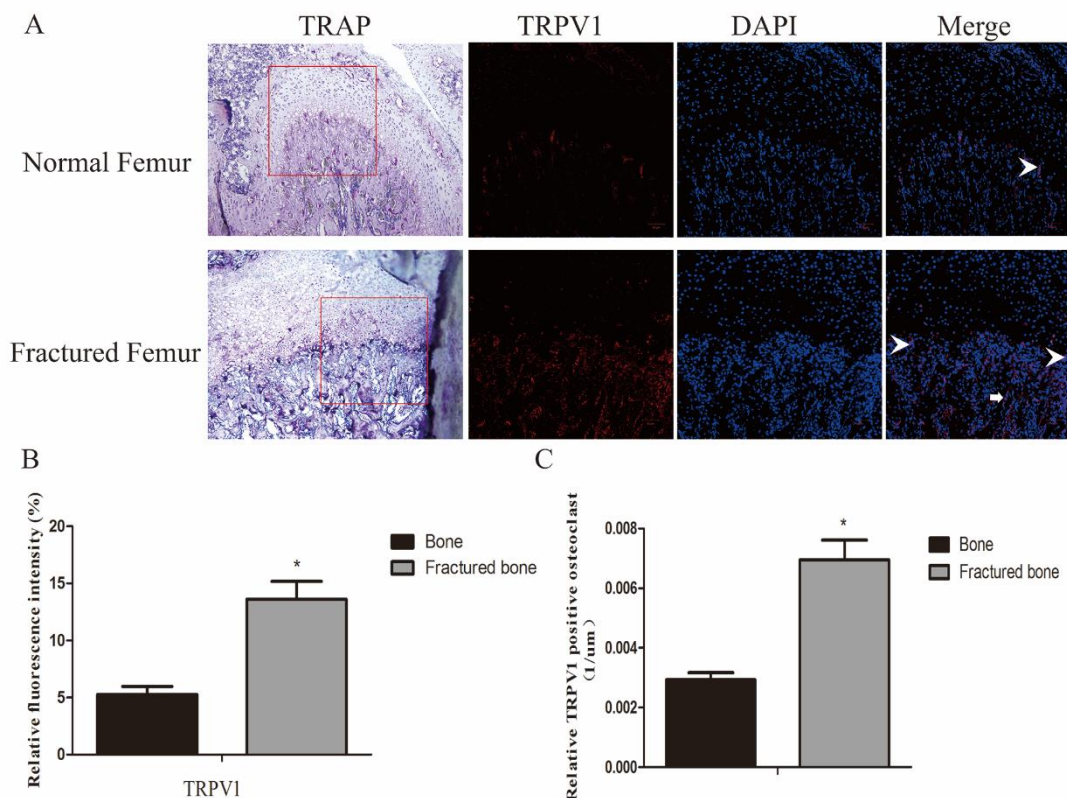**TRPV1 deletion impaired fracture healing and inhibited osteoclast and osteoblast differentiation**

Lin-Hai He[1,¶], Meng Liu[1,¶], Yang He[1], E Xiao[1], Lu Zhao[1], Ting Zhang[2], Hua-Qian Yang[3], Yi Zhang[1]*

Supplemental figure 1 legend

TRPV1 expressions in bone and fracture healing. A: Left panel showed the TRAP staining. The rose color cells were TRAP-positive osteoclast. The right panel showed the TRPV1 expression in bone and fractured bone by immunofluorescence. The white arrow heads shows the TRPV1 positive osteoclast. The white arrow shows the bone lining cells. B: the quantification results of TRPV1 immunofluorescence intensity analyzed

14    by Image J software. C: the quantification results of TRPV1 positive

15    osteoclasts analyzed by BIOQUANT OSTEO Bone Biology Research

16    System.

17
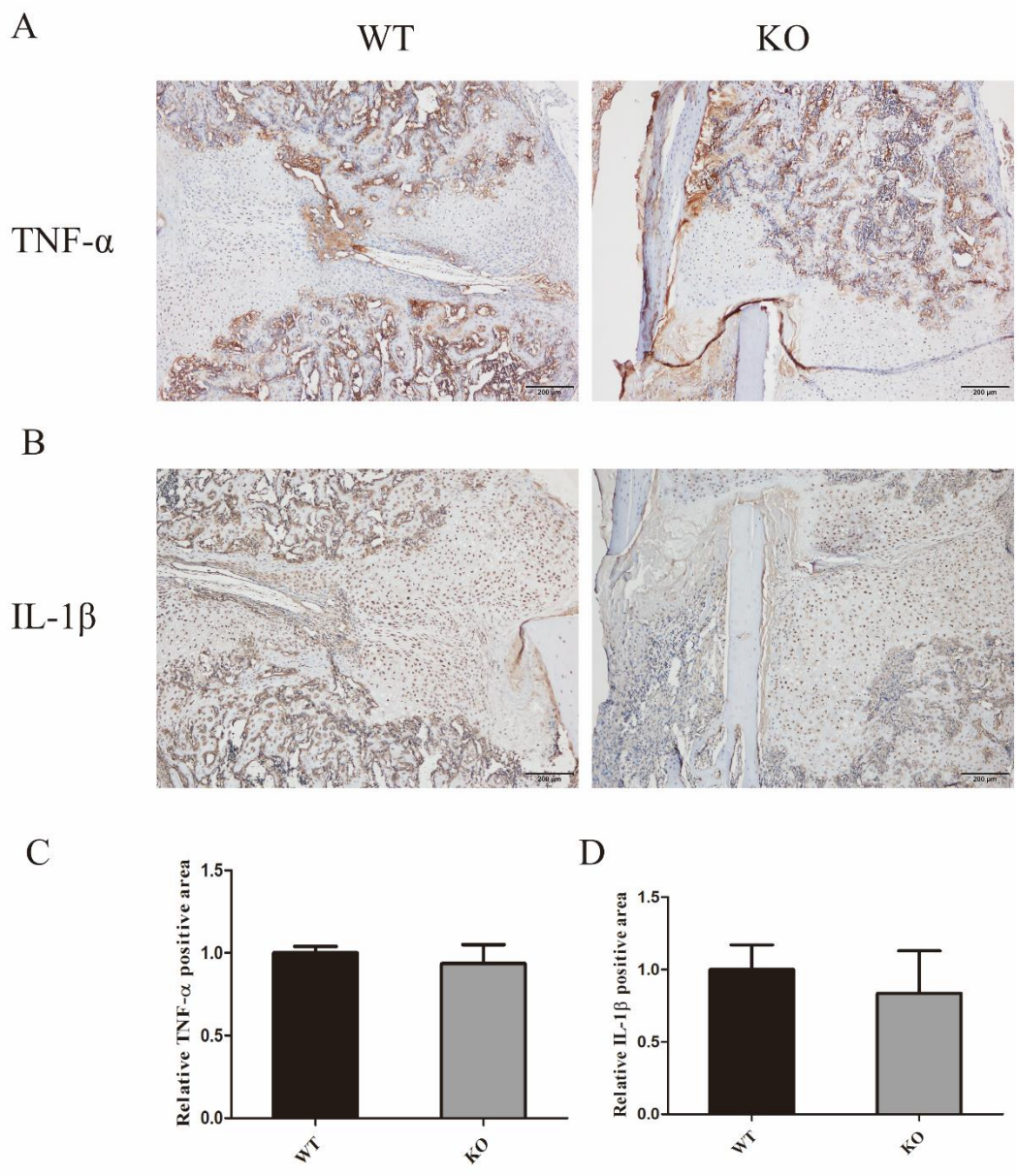


18

19    Supplemental figure 2 legend

20    Inflammation factors expression during fracture healing in WT and KO

21    group. A: TNF-α expression in fracture callus detected by

22    immunohistochemistry staining. B: IL-1β expression in fracture callus

23    detected by immunohistochemistry staining. C and D: quantification

24    results of relative TNF-α and IL-1β positive area. No statistical differences

25    of TNF-α and IL-1β expression between WT and KO group. *= p <0.05