



**Supplemental Figure 10. IFN $\beta$ , ISGs, and osteoclastogenesis.** IFN $\beta$  production is stimulated as a result of signaling through tumor necrosis factor receptors (TNFRs), of which RANK is an example. Interactions of RANK with RANK ligand (RANKL) activates pathways that promote production of IFN $\beta$  and osteoclastogenesis. (A). IFN $\beta$  promotes transcription of genes that inhibit osteoclastogenesis. (B). In absence of JAK1, type I IFNs cannot induce the canonical type I IFN pathway, which includes genes that inhibit osteoclastogenesis.