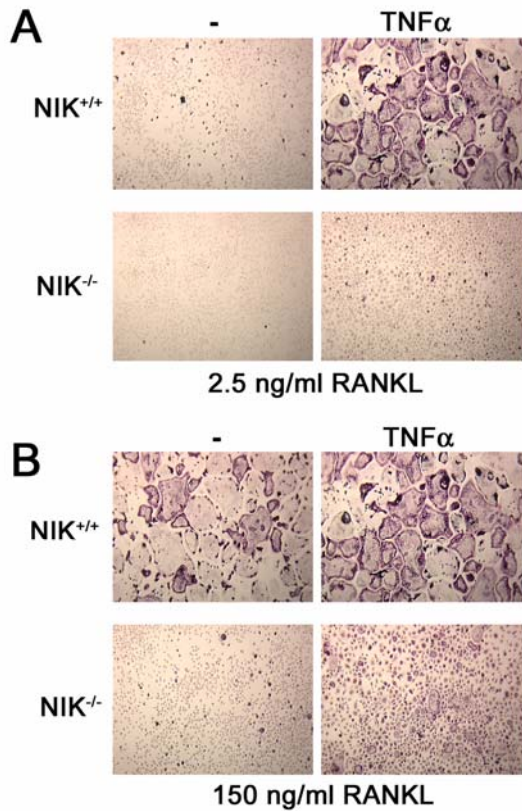


Supplemental Figure 1– RAG transfer flow cytometry. Splenocytes were isolated from *RAG2*<sup>-/-</sup> recipients of *NIK*<sup>+/+</sup> or *NIK*<sup>-/-</sup> splenocytes at the time of sacrifice (day 32), and stained with antibody to CD90. Dotted lines show CD90+ cells, solid lines show staining of splenocytes from an unmanipulated *RAG2*<sup>-/-</sup> mouse as negative control. The number of engrafted T cells is similar in recipients of both *NIK*<sup>+/+</sup> and *NIK*<sup>-/-</sup> cells.



Supplemental Figure 2 – Osteoclast culture in RANKL and TNF $\alpha$ .

Bone marrow macrophages ( $5 \times 10^3$ /well in 96-well plate) were differentiated in the presence of RANKL at 2.5 ng/ml (A) or 150 ng/ml (B), with or without added TNF $\alpha$  at 10 ng/ml. Media was changed daily, and cultures were fixed and stained for TRAP on day 5. (A) While TNF $\alpha$  potently induces osteoclastogenesis in *NIK*<sup>+/+</sup> cultures with low dose RANKL, there is little effect on *NIK*<sup>-/-</sup> cultures at this dose. (B) With high dose RANKL, TNF $\alpha$  has little effect in the presence of NIK, where osteoclastogenesis is already optimal. In these conditions, *NIK*<sup>-/-</sup> cultures show a predominance of TRAP+ mononuclear cells, with some small multinucleated cells. Pale stained OCs (ghosts) in *NIK*<sup>+/+</sup> cultures are apoptotic, due to cytokine levels above optimal. 100x.