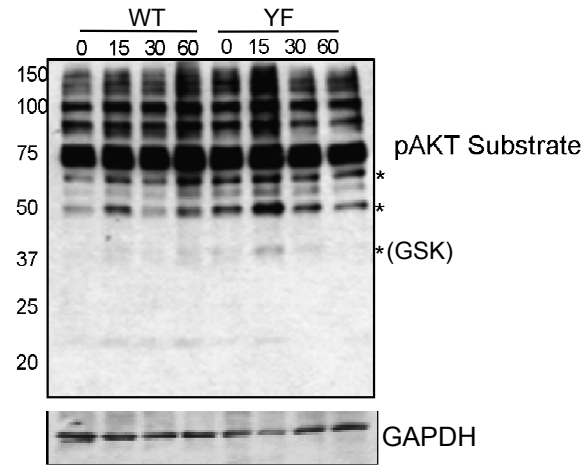
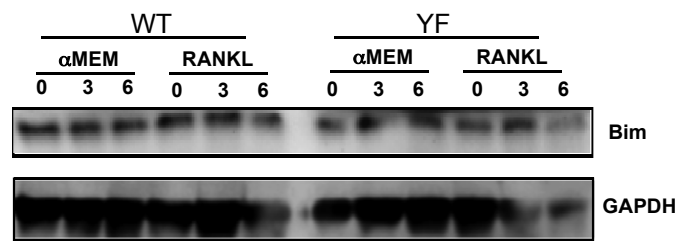


Supplementary Figure 1



Supplementary Figure 2



Supplementary Figure 3

Supplementary Figure 1. Levels of early differentiation markers are not altered in $Cbl^{YF/YF}$ OCLs. Bone marrow cells were differentiated in OCLs with M-CSF and RANKL. The expression of osteoclast differentiation markers on day 0 and 5 was determined by realtime PCR was performed. **A.** PU.1, **B.** c-Fos, **C.** FRA-1, **D.** FRA-2.

Supplementary Figure 2. AKT activity is increased in $Cbl^{YF/YF}$ OCLs. Total cell lysates from WT and YF OCLs were Western blotted and probed with pAKT substrate antibody (upper panel). *Denotes the AKT substrates whose levels are up regulated in $Cbl^{YF/YF}$ OCLs. The blot was stripped and reprobed with anti-GAPDH antibodies to verify protein loading.

Supplementary Figure3 . Levels of pro-apoptotic protein Bim are not altered in $Cbl^{YF/YF}$ OCLs. Osteoclasts are treated as described in Figure 6. Blots were probed with anti-Bim antibody (upper panel). The blot was stripped and reprobed with anti-GAPDH (lower panel) to verify equal protein loading.