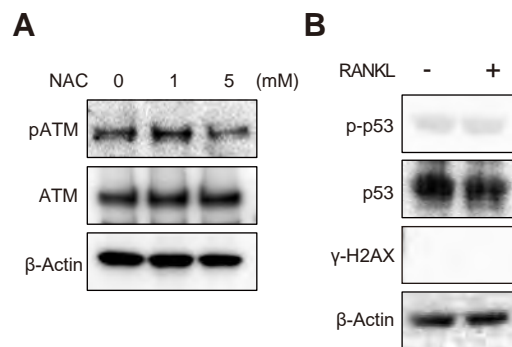


Supplementary Information

**Conditional abrogation of *Atm* in osteoclasts extends osteoclast lifespan and results in reduced bone mass**

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**Supplementary Figure 1.** ATM activation in mature osteoclasts is partly dependent on ROS production. (A) Immunoblots of phosphorylated-ATM (p-ATM) and total ATM in osteoclasts treated with N-acetyl cysteine (NAC; 0, 1, and 5 mM) for 6h. Immunoblots for β-actin were used as loading controls. (B) Western blots showing phosphorylated-p53 (p-p53), total p53, and γ-H2AX in BMMs incubated with (+) or without (-) sRANKL for 5 d.

### Supplemental Table 1

List of oligonucleotides used for quantitative PCR analysis

Gene	Strand	Sequence
<i>Atm</i>	Fwd	CGTGATGACCTGAGGCAAGA
	Rev	GCTGAGAAAGGGGAACCACC
<i>Il1a</i>	Fwd	CGAAGACTACAGTTCTGCCATT
	Rev	GACGTTTCAGAGGTTCTCAGAG
<i>Bcl2</i>	Fwd	ATGCCTTTGTGGA ACTATATGGC
	Rev	GGTATGCACCCAGAGTGATGC
<i>Bcl2l1</i>	Fwd	GCTGGGACACTTTTGTGGAT
	Rev	TGTCTGGTCACTTCCGACTG
<i>Nfatc1</i>	Fwd	AACGCCCTGCTGACCACCGATAGCA
	Rev	CCCGGGTGCCTTCCGTCTCATA
<i>Fos</i>	Fwd	CCAAGCGGAGACAGATCAACTT
	Rev	TCCAGTTTTTCCTTCTCTTTCAGCAGAT
<i>Acp5</i>	Fwd	CCAATGCCAAAGAGATCGCC
	Rev	TCTGTGCAGAGACGTTGCCAAG
<i>Dcstamp</i>	Fwd	TCCTCCATGAACAAACAGTTCCAA
	Rev	AGACGTGGTTTAGGAATGCAGCTC
<i>Gapdh</i>	Fwd	TCAACAGCAACTCCC ACTCTTCC
	Rev	ACCCTGTTGCTGTAGCCGTATTC