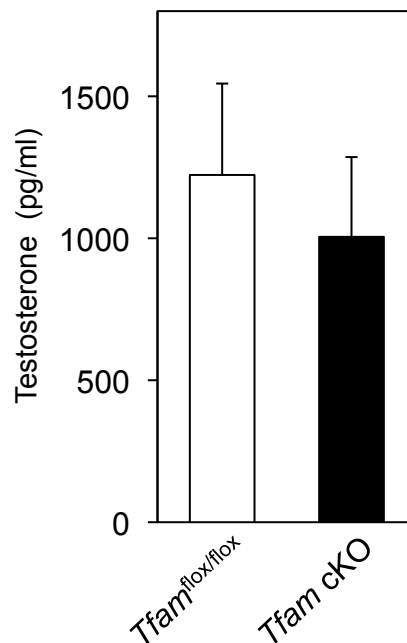


## Supplemental Information

### Intracellular and extracellular ATP coordinately regulate the inverse correlation between osteoclast survival and bone resorption

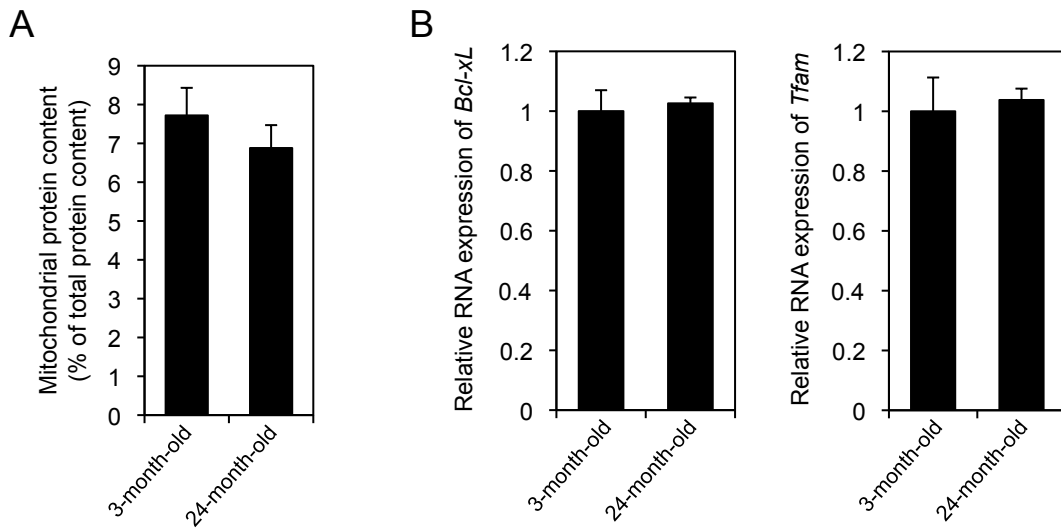
Tsuyoshi Miyazaki, Mitsuyasu Iwasawa, Tomoki Nakashima, Shuuichi Mori, Kazuhiro Shigemoto, Hiroaki Nakamura, Hideki Katagiri, Hiroshi Takayanagi, and Sakae Tanaka

Supplemental Figure S1 (related to Figure 2)



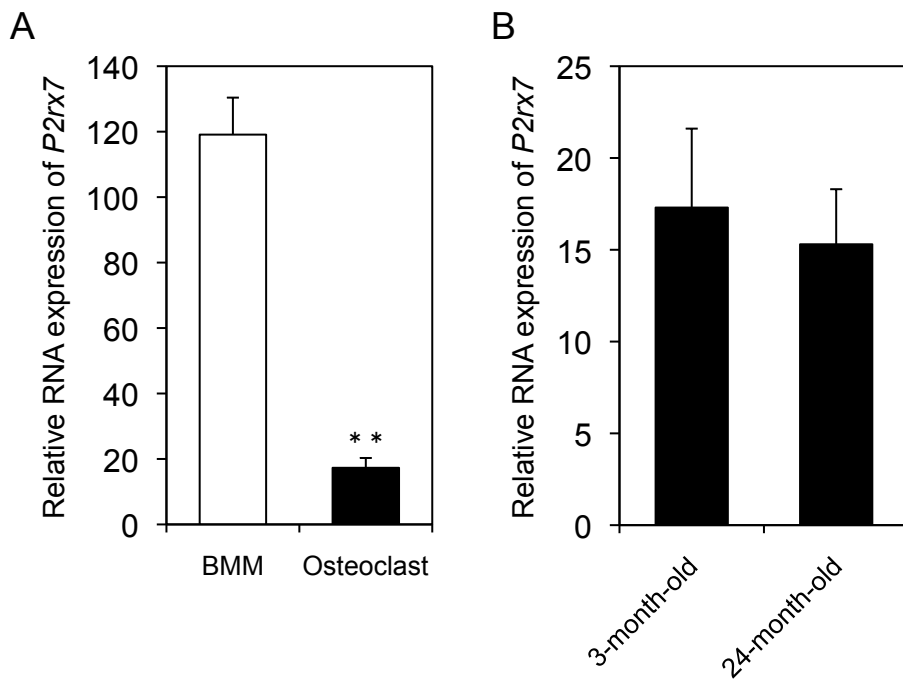
**Supplemental Figure S1. Serum testosterone levels in *Tfam cKO* mice.** No significant differences were observed between male *Tfam cKO* and *Tfam<sup>flox/flox</sup>* mice in levels of serum testosterone (n = 4 for each genotype). Serum testosterone was measured using the Testosterone ELISA Kit (Endocrine Technologies).

Supplemental Figure S2 (related to Figure 9)



**Supplemental Figure S2. Age-related changes in osteoclasts.** (A) Mitochondrial protein content in osteoclasts derived from 3-month-old and 24-month-old mice. (B) Real time PCR analysis of *Bcl-xL* and *Tfam* mRNA levels in osteoclasts derived from 3-month-old and 24-month-old mice. No differences in *Bcl-xL* and *Tfam* mRNA levels were observed among these osteoclasts.

Supplemental Figure S3 (related to Figure 9)



**Supplemental Figure S3. Relative expression of *P2rx7* in osteoclasts.** (A) The expression levels of *P2rx7* mRNA in BMMs and osteoclasts. \*\* $p < 0.01$  versus BMMs. (B) The expression levels of *P2rx7* mRNA in osteoclasts derived from 3-month-old and 24-month-old mice.