

Supplementary Materials

# Strontium Ranelate Inhibits Osteoclastogenesis Through NF- $\kappa$ B-Pathway-Dependent Autophagy

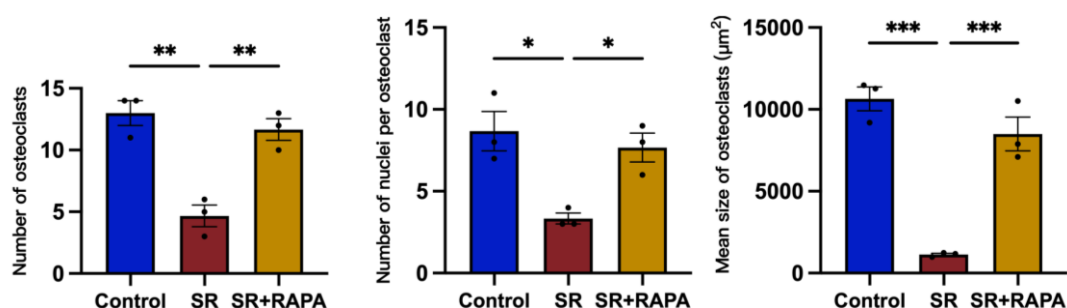
Dongle Wu <sup>1,2,†</sup>, Xuan Sun <sup>1,2,†</sup>, Yiwei Zhao <sup>1,2,†</sup>, Yuanbo Liu <sup>1,2</sup>, Ziqi Gan <sup>1,2</sup>, Zhen Zhang <sup>1,2</sup>, Xin Chen <sup>1,2</sup> and Yang Cao <sup>1,2,\*</sup>

<sup>1</sup> Hospital of Stomatology, Guanghua School of Stomatology, Sun Yat-sen University, Guangzhou 510055, China

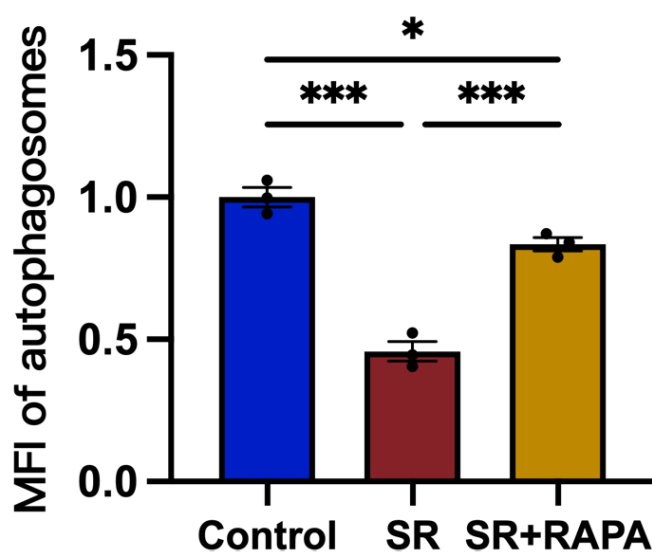
<sup>2</sup> Guangdong Provincial Key Laboratory of Stomatology, Guangzhou 510080, China

\* Correspondence: caoyang@mail.sysu.edu.cn

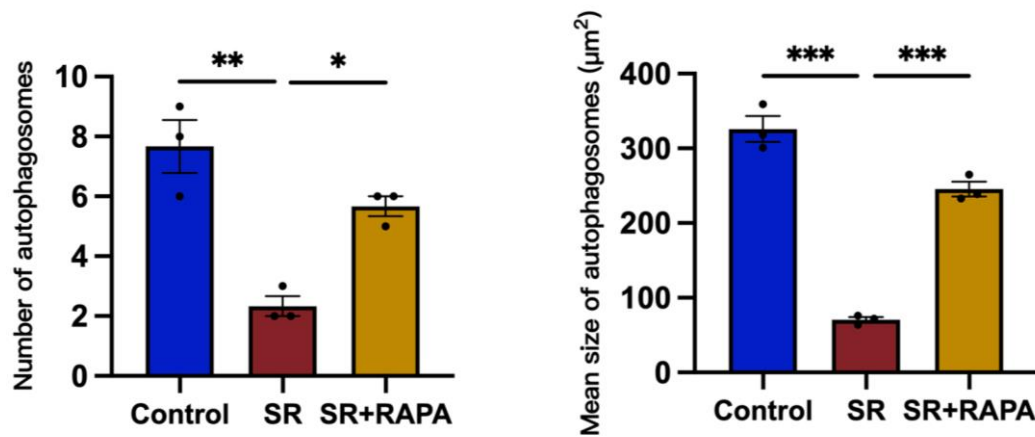
† These authors contributed equally to this work.



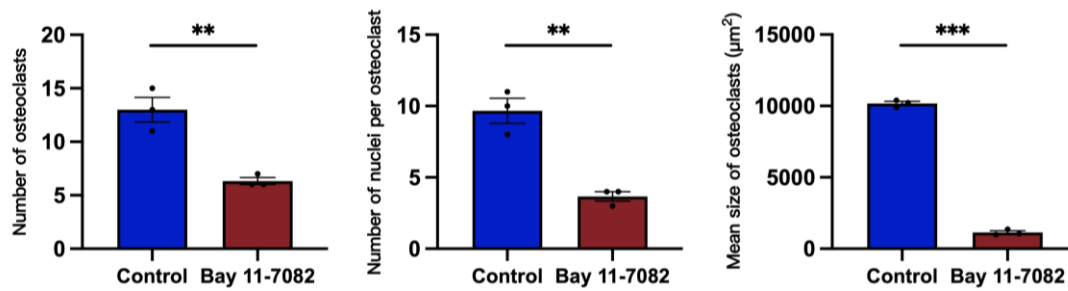
**Figure S1.** The number of osteoclasts, the number of nuclei per osteoclast, and the mean size of osteoclasts after pre-osteoclasts were treated for 5 days in the control group, the strontium ranelate (SR) group, and the SR+rapamycin (RAPA) group. (n = 3, mean  $\pm$  SD, \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001).



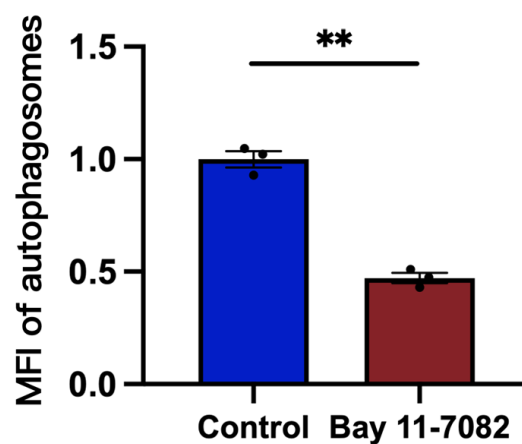
**Figure S2.** The mean fluorescence intensity (MFI) of autophagosomes after pre-osteoclasts received different treatments for 5 days. (n = 3, mean  $\pm$  SD, \*P < 0.05, \*\*\*P < 0.001).



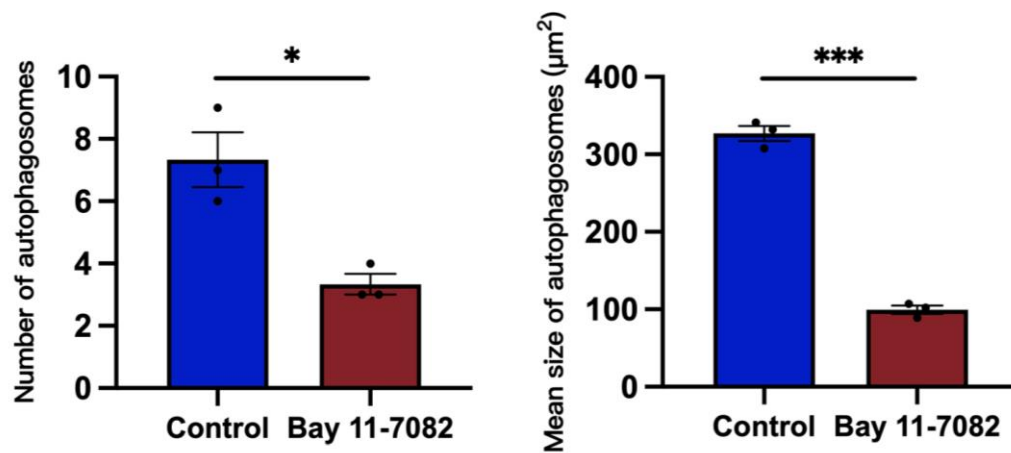
**Figure S3.** The number and mean size of autophagosomes after pre-osteoclasts received different treatments for 5 days. (n = 3, mean ± SD, \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001).



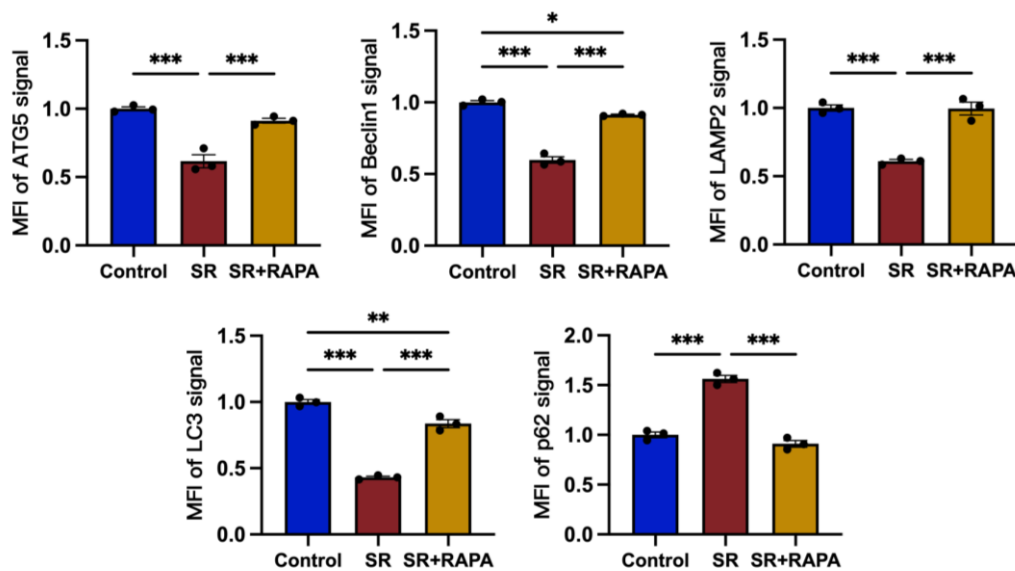
**Figure S4.** The number of osteoclasts, the number of nuclei per osteoclast, and the mean size of osteoclasts after pre-osteoclasts received different treatments for 5 days. (n = 3, mean ± SD, \*\*P < 0.01, \*\*\*P < 0.001).



**Figure S5.** The mean fluorescence intensity (MFI) of autophagosomes after pre-osteoclasts received different treatments for 5 days. (n = 3, mean ± SD, \*P < 0.05, \*\*\*P < 0.001).



**Figure S6.** The number and mean size of autophagosomes after pre-osteoclasts received different treatments for 5 days. (n = 3, mean  $\pm$  SD, \*P < 0.05, \*\*\*P < 0.001).



**Figure S7.** The mean fluorescence intensity (MFI) of ATG5, Beclin1, LAMP2, LC3, and p62 at the pressure side of the first molars on day 7 in different groups. (n = 5, mean  $\pm$  SD, \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001).