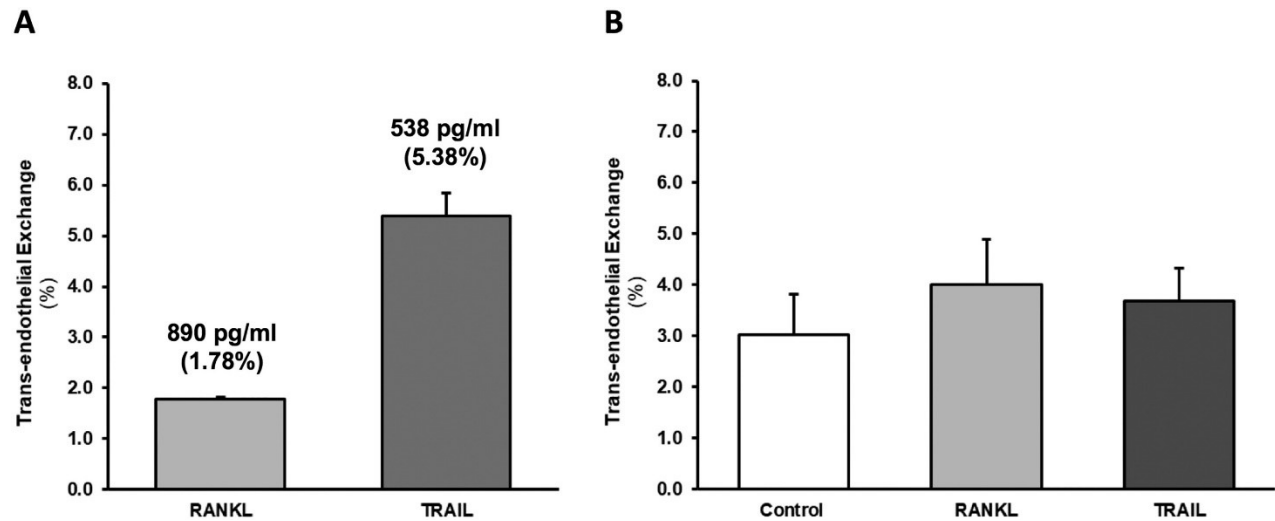
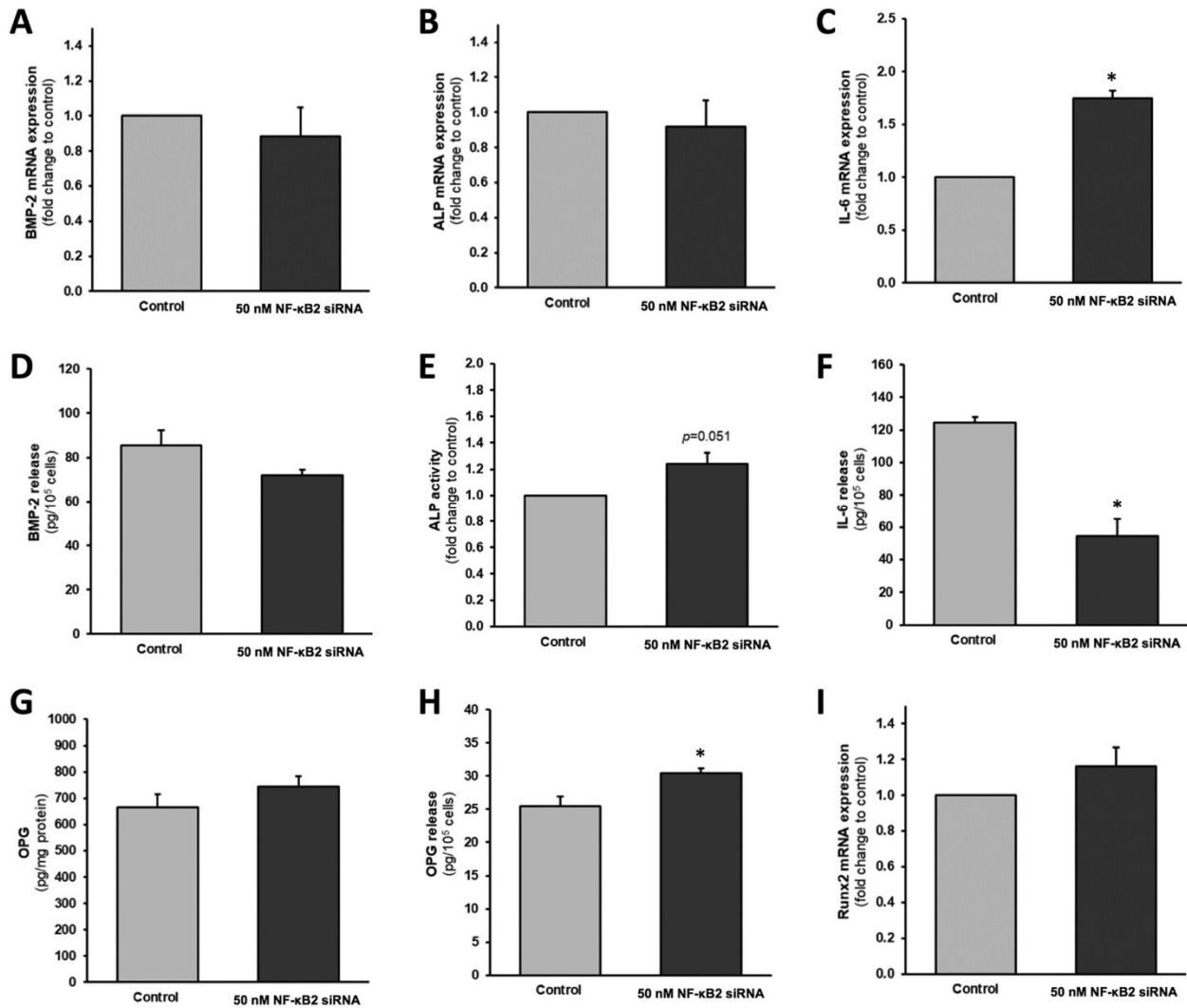


The following are the supplementary data related to this article.

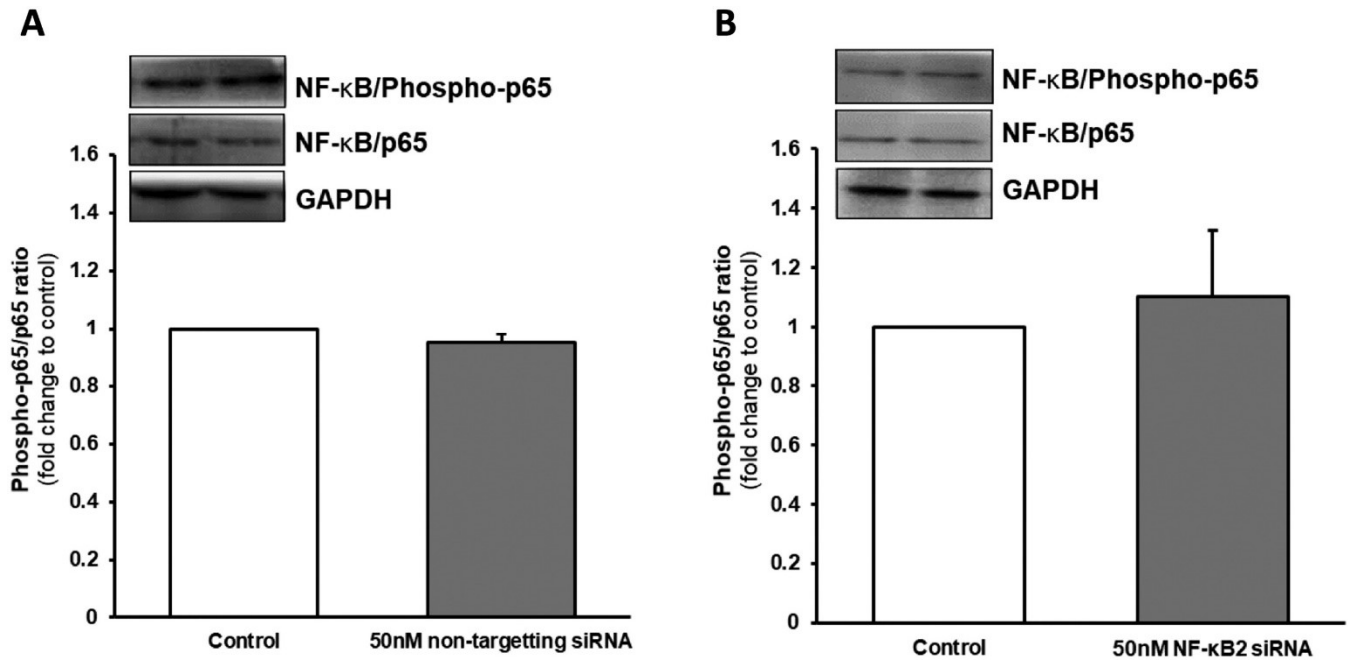
Cellular Signalling  
Volume 47, July 2018, Pages 142-150



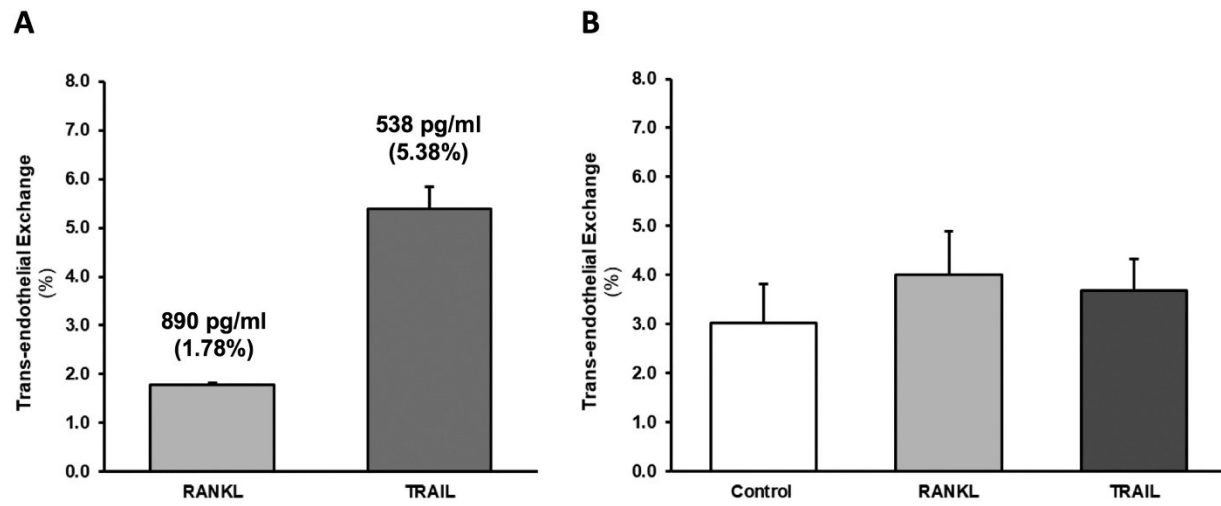
Supplementary Fig. S1. Transendothelial permeability kinetics of RANKL and TRAIL within the HAEC:HASMC co-culture model. Confluent luminal HAECs were treated for 72 h with either RANKL (25 ng/ml) or TRAIL (5 ng/ml). **(A)** Post-treatment, levels of exchange of each recombinant ligand from the luminal (HAEC) space into the sub-luminal (HASMC) space were monitored by ELISA (RANKL/DuoSet DY626, TRAIL/DuoSet DY375, R&D Systems). Numbers above histograms indicate ligand exchange/subluminal concentration (pg/ml) and final level of exchange expressed as a proportion of original luminal dose (%). **(B)** The effects of either ligand on HAEC barrier function were also assessed according to the method of Rochfort et al. [17].



Supplementary Fig. S2. Effects of NF-κB2 siRNA on osteoblastic genes in HAECs. HAECs were transfected with 50 nM NF-κB2 siRNA. Post-transfection, HAECs were subsequently harvested and monitored for; (A) BMP-2 mRNA; (B) ALP mRNA; (C) IL-6 mRNA; (D) BMP-2 release; (E) ALP activity; and (F) IL-6 release; (G) OPG cellular protein; (H) OPG release; (I) Runx2 mRNA. \* $P \leq .05$  versus unsilenced control.



Supplementary Fig. S3. Effects of scrambled nt-siRNA on osteoblastic genes in HAECs. HAECs were transfected with 50 nM scrambled nt-siRNA. Post-transfection, HAECs were subsequently harvested and monitored for; **(A)** BMP-2 mRNA; **(B)** ALP mRNA; **(C)** IL-6 mRNA; **(D)** BMP-2 release; **(E)** ALP activity; and **(F)** IL-6 release; **(G)** OPG cellular protein; **(H)** OPG release; **(I)** Runx2 mRNA. \* $P \leq .05$  versus unsilenced control.



Supplementary Fig. S4. Effects of NF- $\kappa$ B2 siRNA on NF- $\kappa$ B/p65 activation in HAECs. Cells were transfected with either **(A)** 50 nM scrambled nt-siRNA control or **(B)** 50 nM NF- $\kappa$ B2 siRNA. Post-transfection, cells were harvested and monitored for potential knockdown in levels of NF- $\kappa$ B/p65 activation using Western blotting. Blots are representative. Key: nt, non-targeting/scrambled.