## <u>Supplemental Fig. 5</u>: Development and characterization of CPP conjugates with shorter sequences spanning RANK Motif 2 or 3

(*A-B*) Structure of CPP conjugates with 8 or 6 amino acids derived from RANK Motif 2 or 3 (M2-8, iM2-8, M3-8, iM3-8). Mutated amino acids are highlighted in red. (*C-D*) Osteoclastogenesis assays with M2-8 plus M3-8 or M2-6 plus M3-6. The experimental procedures are similar to those described in Fig. 5. TRAP staining was then performed. Representative areas of the cultures are shown (left panel), and the number of TRAP-positive MNCs was counted (right panel). Scale bar = 500  $\mu$ m. Data are expressed as mean  $\pm$  S.D. of three independent experiments. \*, p < 0.05; \*\*, p < 0.01; \*\*\*, p < 0.001.

Supplemental figure 5

Α

С

D

## В **FITC-Ahx FITC-Ahx** Hph-1 **RPVQEETL** Hph-1 **PVQEET** M2-8 M2-6 **FITC-Ahx** Hph-1 iM2-8 Hph-1 RLLNDD M2-6 FITC-Ahx FITC-Ahx **FITC-Ahx** Hph-1 RPVQEQGG Hph-1 **PVQEQG** M3-8 M3-6 M3-8 FITC-Ahx Hph-1 RLLNDNAG **FITC-Ahx** Hph-1 iM3-6 2 µM M2-8 4 μM\_M2-8 6 µM\_M2-8 8 μ**Μ** Μ2-8 2 µM<sup>T</sup>M3-8 4 µM<sup>T</sup>M3-8 6 µM<sup>-</sup>M3-8 8 μΜ<sup>-</sup>Μ3-8 iM2-8 + iM3-8 M2-8 + M3-8 180 TRAP+ MNCs (NO./well) 160 140 120 100 2 μΜ\_iM2-8 2 μΜ iM3-8 4 μΜ\_iM2-8 4 μΜ iM3-8 6 µM\_iM2-8 8 µM\_iM2-8 80 8 µM<sup>+</sup>iM3-8 6 µM<sup>+</sup>iM3-8 60 40 20 0 2 µM 4 µM 6µM 8µM 2 μM\_M2-6 4 μΜ<sub>.</sub> Μ2-6 6 µM M2-6 8 µM\_M2-6 2 µM M3-6 4 µM<sup>T</sup>M3-6 6 µM<sup>T</sup>M3-6 8 µM M3-6 iM2-6 + iM3-6 120 M2-6 + M3-6TRAP+ MNCs (NO./well) 100 80 4 μM\_iM2-6 6 μM\_iM2-6 8 µM\_iM2-6 2 µM\_iM2-6 60 2 µM<sup>-</sup>iM3-6 4 µM<sup>-</sup>iM3-6 6 µM<sup>-</sup>iM3-6 8 uM<sup>-</sup>iM3-6 40 20 0 8 µM 2 µM 4 µM 6 µM