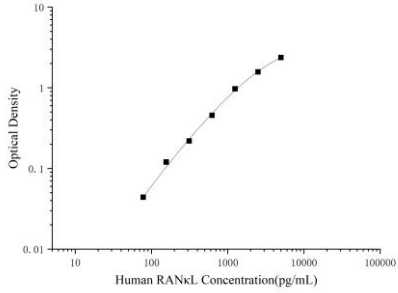


Applications

Human RANKL Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images
ELISA Capture	0.5-4ug/mL	Human RANKL Capture Antibody	
ELISA Detection	1:1000-1:10000	Human RANKL Detection Antibody (Biotin)	

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

RANKL gene encodes a type II membrane protein of 316 amino acids with a predicted molecular mass of 35 kD. RANKL is cleaved to produce a soluble form with biological activity. The shedding of membrane-bound RANKL appears to be mediated by expression of MMP14 and ADAM10. Suppression of MMP14 in primary osteoblasts increases membrane-bound RANKL and promotes osteoclastogenesis in cocultures with macrophages. Therefore, RANKL shedding seems to be an important process that down-regulates local osteoclastogenesis. Alternatively, an increased production of RANKL by osteoblastic cells leads to osteoclast differentiation, activation, and survival, which results in increased bone resorption. Binding of RANKL to its receptor RANK activates TNF receptor-associated factor 6 (TRAF6), which is linked to downstream pathways including NF- κ B, c-jun N-terminal kinase (JNK) or Src.