


Human RANKL protein, Fc Tag

Cat #: PRP100260

Size: 100µg

Product Information

	Product Name: Human RANKL protein, Fc Tag		
REF	Catalog Number: PRP100260	LOT	Lot Number: Refer to product label
	Purity: > 90 % as determined by SDS-PAGE		
	Storage: Store at -20°C		Preparation method: Human Cells
	Shipping: The product is shipped at ambient temperature.		

Background: Tumor necrosis factor ligand superfamily member 11, also known as Receptor activator of nuclear factor kappa-B ligand, Osteoprotegerin ligand, TNFSF11, RANKL, TRANCE, OPGL and CD254, is a single-pass type II membrane protein which belongs to the tumor necrosis factor family. The receptor activator of nuclear factor-kappaB ligand (RANKL), its cognate receptor RANK, and its natural decoy receptor osteoprotegerin have been identified as the final effector molecules of osteoclastic bone resorption. RANK and RANKL are key regulators of bone remodeling and regulate T cell/dendritic cell communications, and lymph node formation. Moreover, RANKL and RANK are expressed in mammary gland epithelial cells and control the development of a lactating mammary gland during pregnancy. Genetically, RANKL and RANK are essential for the development and activation of osteoclasts and bone loss in response to virtually all triggers tested. Inhibition of RANKL function via the natural decoy receptor osteoprotegerin (OPG, TNFRSF11B) prevents bone loss in postmenopausal osteoporosis and cancer metastases. Importantly, RANKL appears to be the pathogenetic principle that causes bone and cartilage destruction in arthritis. RANK-RANKL signaling not only activates a variety of downstream signaling pathways required for osteoclast development, but crosstalk with other signaling pathways also fine-tunes bone homeostasis both in normal physiology and disease. In addition, RANKL and RANK have essential roles in lymph node formation, establishment of the thymic microenvironment, and development of a lactating mammary gland during pregnancy.

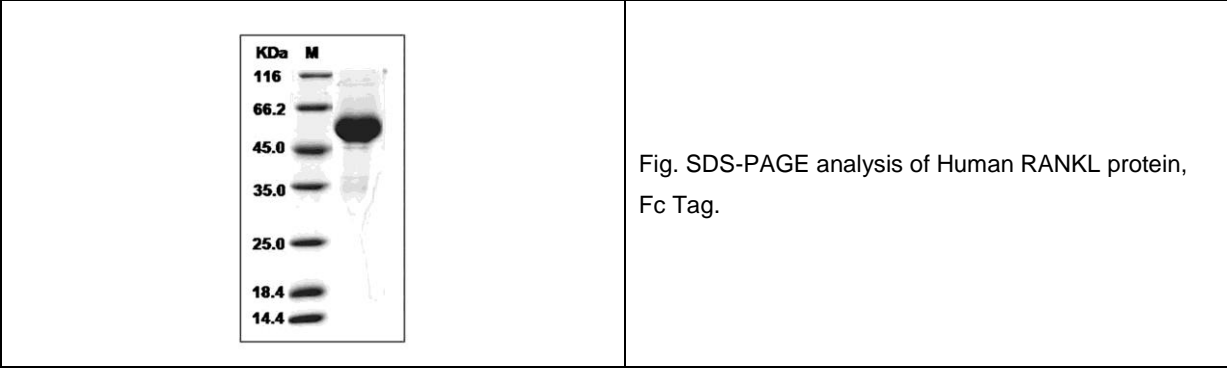
Sequence: Amino acid sequence derived from human TNFSF11 (AAC51762.1) (Gly63-Asp244) was expressed with the Fc region of mouse IgG1 at the N-terminus.

Protein length: The recombinant human TNFSF11/mFc comprises 418 amino acids and has a predicted molecular mass of 47.1 kDa. The apparent molecular mass of the monomer is approximately 48-56 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation: Lyophilized from sterile PBS, pH 7.4.

Storage Instructions: Lyophilized Human RANKL protein, Fc Tag product should be stored desiccated below -18°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized Human RANKL protein, Fc Tag in sterile ddH₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.



Note: The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.