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Tnfsf11
Recombinant Mouse RANKL / TNFSF11 / CD254 (Fc Tag)

Catalog No.	CRM592A-Fc CRM592B-Fc	**Quantity:**	10 µg 20 µg

Alternate Names: Tumor necrosis factor ligand superfamily member 11, Osteoclast differentiation factor, ODF, Osteoprotegerin ligand, OPGL, Receptor activator of nuclear factor kappa-B ligand, RANKL, TNF-related activation-induced cytokine, TRANCE, CD254, Tumor necrosis factor ligand superfamily member 11, membrane form, Tumor necrosis factor ligand superfamily member 11, soluble form

Description: Tumor necrosis factor ligand superfamily member 11 (RANKL) is a single-pass type II membrane protein which belongs to the tumor necrosis factor family. 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. RANKL and RANK are expressed in mammary gland epithelial cells and control the development of a lactating mammary gland during pregnancy. In addition, RANKL and RANK have essential roles in lymph node formation, establishment of the thymic microenvironment.

UniProt ID: O35235

Accession Number: AAC40113.1

Protein Construction: A DNA sequence encoding the extracellular domain of mouse TNFSF11 (Arg 72-Asp 316) was fused with the Fc region of human IgG1 at the N-terminus.

Source: HEK293 Cells

Formulation: Lyophilized from sterile PBS, pH 7.4, containing 5 % mannitol, 5% trehalose and 0.01% Tween 80

Molecular Weight: The rmTNFSF11/Fc is a disulfide-linked homodimer. The reduced monomer consists of 505 aa with a predicted MW of 56 kDa and migrates at ~50 kDa in SDS-PAGE under reducing conditions.

Purity: > 87 % as determined by SDS-PAGE.

Endotoxin Level: < 1.0 EU per µg of the protein as determined by the LAL method

Biological Activity: Immobilized mouse Fc-TNFSF11 at 10 µg/ml (100 µl/well) can bind biotinylated human TNFRSF11B-His. The EC50 of biotinylated human TNFRSF11B-His is 0.07-0.17 µg/ml.

Predicted N-terminal: Glu

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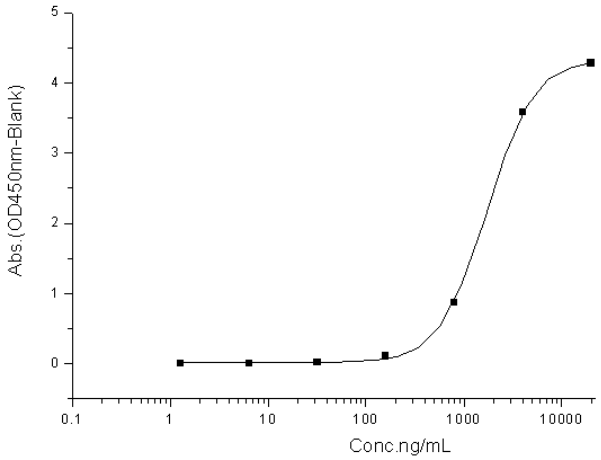
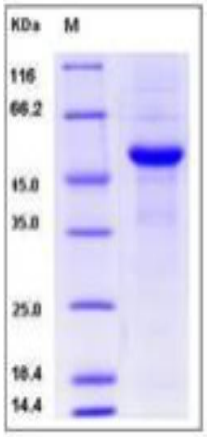
Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX**. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

Immobilized mouse Fc-TNFSF11 at 10 µg/ml (100 µl/well) can bind biotinylated human TNFRSF11B-His, The EC50 of biotinylated human TNFRSF11B-His is 0.07-0.17 µg/ml.



SDS-PAGE



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