

TNFRSF11A

Recombinant Human RANK Receptor, soluble

Catalog No.	CRR102B	Quantity:	100 µg
Alternate Names:	Tumor necrosis factor receptor superfamily member 11A, TNFRSF11A, CD265, Osteoclast differentiation factor, ODFR, Receptor activator of NF-KB		
Description:	RANKL and RANK are members of the TNF superfamily of ligands and receptors that play an important role in the regulation of specific immunity and bone turnover. RANK (receptor) was originally identified as a dendritic-cell-membrane protein, which by interacting with RANKL augments the ability of dendritic cells to stimulate naïve T cell proliferation and to promote the survival of RANK + T cells. RANK is also expressed in a variety of tissues including skeletal muscle, thymus, liver, colon, small intestine and adrenal gland. The RANK/RANKL interaction is important in the regulation of osteoclastogenesis and in dendritic-cell-mediated T cell immune responses. Impairments in RANK signaling have been implicated in the induction of expansile osteolysis and Paget disease of bone (PDB2). Recombinant human sRANK receptor contains the TNFR homologous cysteine rich portion of the extracellular domain of RANK receptor.		
UniProt ID:	Q9Y6Q6		
Gene ID:	8792		
Source:	<i>E. coli</i>		
Molecular Weight:	19.3 kDa (175 aa)		
Formulation:	Lyophilized from 10 mM sodium phosphate, pH 7.2.		
Purity:	> 98% by SDS-PAGE & HPLC analyses		
Endotoxin Level:	< 0.1 ng/µg protein (< 1 EU/µg)		
Biological Activity:	ED ₅₀ < 30-50 ng/ml, determined by its ability to inhibit sRANKL induced NFκB in RAW264.7 cells in the absence of any cross-linking, in the presence of 15ng/ml of recombinant sRANKL.		
Amino Acid Sequence:	MQIAPPCTSE KHYEHLGRCC NKCEPGKYMS SKCTTTSDSV CLPCGP DEYL DSWNEEDKCL LHKVCDTGKA LVAVVAGNST TPRRCAC TAG Y HWSQDCECC RRNTECAPGL GAQHPLQLNK DTVCKPCLAG YFSDAFS STD KCRPWTNCTF LGKRVEHHGT EKSDAVCSSS LPARK		
Reconstitution:	Centrifuge vial prior to opening. Reconstitute in deionized water to a concentration of 0.1-1.0 mg/ml with gentle mixing. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.		
Storage & Stability:	Lyophilized protein is stable for 1 month at room temperature, 6 months at 2-8°C and 1 year at -20°C to -80°C. Store reconstituted product for 1 week at 2-8°C or in working aliquots for 3 months at -20°C to -80°C. Avoid repeated freeze-thaw cycles.		

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