



Product Data Sheet

Human Recombinant Receptor Activator of Nuclear Factor Kappa-β (NF-κβ) Ligand (RANKL) Protein

Catalog Number: ORF.GF.RANKL

Product Details	
Product Name	Human Recombinant Receptor Activator of Nuclear Factor Kappa-β (NF-κβ) Ligand (RANKL) Protein
Catalog Numbers	ORF.GF.RANKL-10, ORF.GF.RANKL-50, ORF.GF.RANKL-100, ORF.GF.RANKL-500, ORF.GF.RANKL-1000
Sizes	10 μg, 50 μg, 100 μg, 500 μg, 1000 μg
Species	Human
UniProt ID	O14788
Product Form	Lyophilized

Product Description	Product Image
<p>Receptor Activator of Nuclear Factor Kappa-B Ligand (RANKL) is a key member of the tumor necrosis factor (TNF) superfamily, known for its critical role in regulating cell differentiation, proliferation, and survival. RANKL exists as a type II homotrimeric transmembrane protein and can be found in both membrane-bound and soluble forms.</p> <p>RANKL specifically binds to its receptor, RANK (Receptor Activator of Nuclear Factor Kappa-B), to initiate downstream signaling pathways, including the AKT pathway, which governs cell survival and function. The decoy receptor osteoprotegerin (OPG) also interacts with RANKL, competitively inhibiting its binding to RANK and thereby modulating RANKL activity.</p> <p>Functionally, RANKL plays a central role in osteoclast differentiation and activation, contributing to bone remodeling and resorption. Beyond the skeletal system, RANKL also participates in immune regulation, including T cell activation and broader immune signaling processes.</p> <p>ORF Biologics' recombinant RANKL is produced to deliver high purity, biological activity, and batch-to-batch consistency, making it ideal for research applications in bone metabolism, immune cell regulation, and TNF superfamily signaling.</p>	

For research applications only. Not for diagnostic or therapeutic use.

Product Specifications		
Protein Description	175-amino acid mature human RANKL variant consisting of residues Glu143 to Asp317	
Expression System	Available upon request	
Amino Acid Sequence	EKAMVDGSWL DLAKRSKLEA QPFAHLTINA TDIPSGSHKV SLSSWYHDRG WAKISNMTFS NGKLIVNQDG FYYLYANICF RHHETSGDLA TEYLQLMVYV TKTSIKIPSS HTLMKGGSTK YWSGNSEFHF YSINVGFFK LRSGEISIE VSNPSLLDPD QDATYFGAFK VRDID	
Molecular Weight	SDS-PAGE	19.7 kDa (Expected)
Purity	SDS-PAGE	> 95%
Endotoxin	LAL	<1 EU/microgram
Bioactivity	Ability to induce reporter gene in HT-29 NF-kappaB Luc reporter cells.	Biologically Active

Product Preparation	
Shipping Temperature	Ambient
Form	Lyophilized
Reconstitution Instructions	Reconstitute with sterile PBS.

Storage and Stability		
	Temperature	Storage Time
Liquid Form	2°C to 8°C	1 month
Liquid Form	-20°C to -80°C	3 months

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