Datasheet for ABIN7562288

RANKL Protein (AA 1-316) (His tag)

3 Images

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Overview

Quantity:	1 mg
Target:	RANKL (TNFSF11)
Protein Characteristics:	AA 1-316
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RANKL protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Tnfsf11 Protein expressed in mammalian cells.
Sequence:	MRRASRDYGK YLRSSEEMGS GPGVPHEGPL HPAPSAPAPA PPPAASRSMF LALLGLGLGQ VVCSIALFLY FRAQMDPNRI SEDSTHCFYR ILRLHENADL QDSTLESEDT LPDSCRRMKQ AFQGAVQKEL QHIVGPQRFS GAPAMMEGSW LDVAQRGKPE AQPFAHLTIN AASIPSGSHK VTLSSWYHDR GWAKISNMTL SNGKLRVNQD GFYYLYANIC FRHHETSGSV PTDYLQLMVY VVKTSIKIPS SHNLMKGGST KNWSGNSEFH FYSINVGGFF KLRAGEEISI QVSNPSLLDP DQDATYFGAF KVQDID **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

Product Details

	• Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	RANKL (TNFSF11)
Alternative Name:	Tnfsf11 (TNFSF11 Products)
Background:	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) (CD antigen CD254) [Cleaved into: Tumor necrosis factor ligand superfamily member 11, membrane form, Tumor necrosis factor ligand superfamily member 11, soluble form],FUNCTION: Cytokine that binds to TNFRSF11B/OPG and to TNFRSF11A/RANK. Osteoclast differentiation and activation factor (PubMed:22437732). Augments the ability of dendritic cells to stimulate naive T-cell proliferation. May be an important regulator of interactions between T-cells and dendritic cells and may play a role in the regulation of the T-cell-dependent immune response. May also play an important role in enhanced bone-resorption in humoral hypercalcemia of malignancy (By similarity). Induces osteoclastogenesis by activating multiple signaling pathways in osteoclast precursor cells, chief among which is induction of long lasting oscillations in the intracellular concentration of Ca (2+) resulting in the activation of NFATC1, which translocates to the nucleus and induces osteoclast-specific gene transcription to allow differentiation of osteoclasts

Target Details

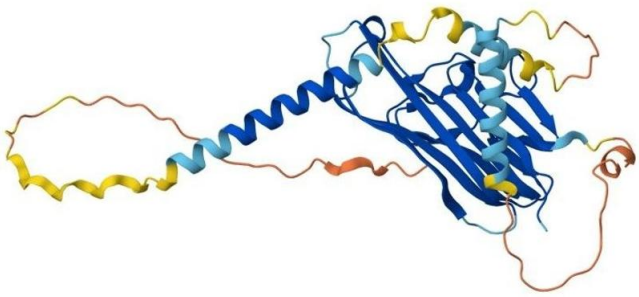
	(PubMed:18586671, PubMed:24039232, PubMed:27336669). During osteoclast differentiation, in a TMEM64 and ATP2A2-dependent manner induces activation of CREB1 and mitochondrial ROS generation necessary for proper osteoclast generation (PubMed:23395171, PubMed:26644563). {ECO:0000250|UniProtKB:O14788, ECO:0000269|PubMed:18586671, ECO:0000269|PubMed:22437732, ECO:0000269|PubMed:23395171, ECO:0000269|PubMed:24039232, ECO:0000269|PubMed:26644563, ECO:0000269|PubMed:27336669}.
Molecular Weight:	35.0 kDa
UniProt:	O35235
Pathways:	NF-kappaB Signaling

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

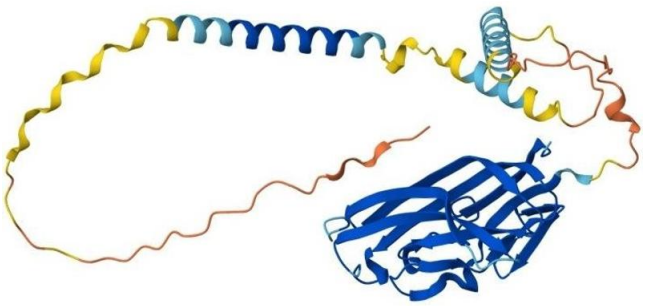
Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months



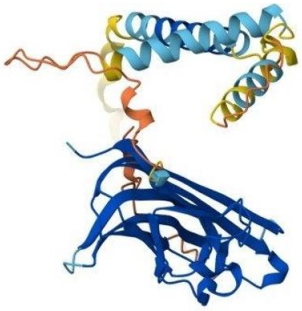
Protein Structure

Image 1. AlphaFold protein structure predicition of Mouse Recombinant Tnfsf11 Protein, UniprotID O35235



Protein Structure

Image 2. AlphaFold protein structure predicition of Mouse Recombinant Tnfsf11 Protein, UniprotID O35235



Protein Structure

Image 3. AlphaFold protein structure predicition of Mouse Recombinant Tnfsf11 Protein, UniprotID O35235