

Datasheet for ABIN7553108

CD40 Ligand Protein (CD40LG) (AA 1-261) (His tag)





Overview

Quantity:	1 mg
Target:	CD40 Ligand (CD40LG)
Protein Characteristics:	AA 1-261
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CD40 Ligand protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CD40LG Protein expressed in mammalian cells.
Sequence:	MIETYNQTSP RSAATGLPIS MKIFMYLLTV FLITQMIGSA LFAVYLHRRL DKIEDERNLH
	EDFVFMKTIQ RCNTGERSLS LLNCEEIKSQ FEGFVKDIML NKEETKKENS FEMQKGDQNP
	QIAAHVISEA SSKTTSVLQW AEKGYYTMSN NLVTLENGKQ LTVKRQGLYY IYAQVTFCSN
	REASSQAPFI ASLCLKSPGR FERILLRAAN THSSAKPCGQ QSIHLGGVFE LQPGASVFVN
	VTDPSQVSHG TGFTSFGLLK L 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:
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- · 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: CD40 Ligand (CD40LG)	
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Alternative Name: CD40LG (CD40LG Products)

Background:

CD40 ligand (CD40-L) (T-cell antigen Gp39) (TNF-related activation protein) (TRAP) (Tumor necrosis factor ligand superfamily member 5) (CD antigen CD154) [Cleaved into: CD40 ligand, membrane form, CD40 ligand, soluble form (sCD40L)],FUNCTION: Cytokine that acts as a ligand to CD40/TNFRSF5 (PubMed:1280226, PubMed:31331973). Costimulates T-cell proliferation and cytokine production (PubMed:8617933). Its cross-linking on T-cells generates a costimulatory signal which enhances the production of IL4 and IL10 in conjunction with the TCR/CD3 ligation and CD28 costimulation (PubMed:8617933). Induces the activation of NF-kappa-B (PubMed:15067037, PubMed:31331973). Induces the activation of kinases MAPK8 and PAK2 in T-cells (PubMed:15067037). Induces tyrosine phosphorylation of isoform 3 of CD28 (PubMed:15067037). Mediates B-cell proliferation in the absence of co-stimulus as well as IgE production in the presence of IL4 (By similarity). Involved in immunoglobulin class switching (By similarity). {ECO:0000250|UniProtKB:P27548, ECO:0000269|PubMed:1280226, ECO:0000269|PubMed:15067037, ECO:0000269|PubMed:31331973, ECO:0000269|PubMed:8617933}., FUNCTION: [CD40 ligand, soluble form]: Acts as a ligand for

ECO:0000269|PubMed:8617933}., FUNCTION: [CD40 ligand, soluble form]: Acts as a ligand for integrins, specifically ITGA5:ITGB1 and ITGAV:ITGB3, both integrins and the CD40 receptor are

Target Details

rarget Details	
	required for activation of CD40-CD40LG signaling, which have cell-type dependent effects, such as B-cell activation, NF-kappa-B signaling and anti-apoptotic signaling. {ECO:0000269 PubMed:31331973}.
Molecular Weight:	29.3 kDa
UniProt:	P29965
Pathways:	NF-kappaB Signaling, Production of Molecular Mediator of Immune Response, Cancer Immune Checkpoints
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
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Handling

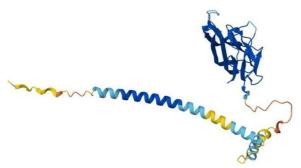
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months



Protein Structure

Image 1. AlphaFold protein structure predicition of Human Recombinant CD40LG Protein, UniprotID P29965

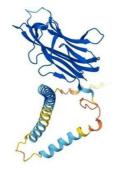




Protein Structure

Image 2. AlphaFold protein structure predicition of Human Recombinant CD40LG Protein, UniprotID P29965





Protein Structure

Image 3. AlphaFold protein structure predicition of Human Recombinant CD40LG Protein, UniprotID P29965

