Datasheet for ABIN4949165

CD40 Ligand Protein (CD40LG) (AA 115-260) (His tag)

2 Images

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Overview

Quantity:	100 µg
Target:	CD40 Ligand (CD40LG)
Protein Characteristics:	AA 115-260
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CD40 Ligand protein is labelled with His tag.
Application:	Functional Studies (Func)

Product Details

Sequence:	AA 115-260
Characteristics:	This protein carries a polyhistidine tag at the N-terminus. The protein has a calculated MW of 16.8 kDa. The protein migrates as 21-25 kDa under reducing (R) condition (SDS-PAGE).
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	CD40 Ligand (CD40LG)
Alternative Name:	CD40 Ligand (CD40LG Products)

Target Details

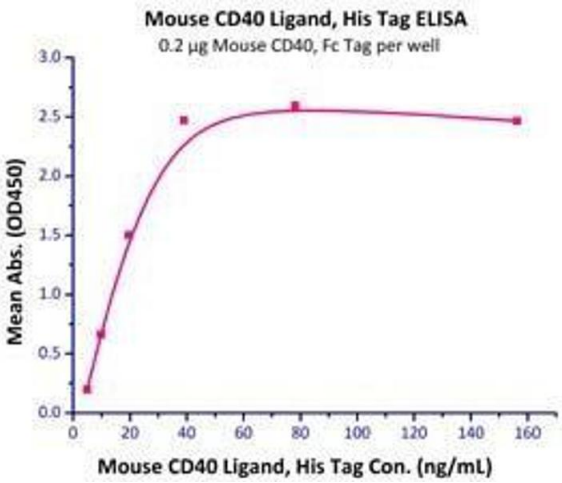
Background:	CD40 ligand is also known as CD40L, CD154, TNFSF5 and T-cell antigen Gp39, is a single-pass type I I membrane protein which belongs to the TNF superfamily of molecules. CD40 ligand is expressed predominantly on activated CD4+ T lymphocytes, and also found in other types of cells, including platelets, mast cells, macrophages, basophils, NK cells, B lymphocytes, as well as non-haematopoietic cells (smooth muscle cells, endothelial cells, and epithelial cells). Although all monomeric, dimeric and trimeric forms of soluble CD40 ligand can bind to CD40, the trimeric form of soluble CD40 ligand has the most potent biological activity through oligomerization of cell surface CD40, a common feature of TNF receptor family members. CD40 ligand binds to CD40 on antigen-presenting cells (APC), which leads to many effects depending on the target cell type. In general, CD40 ligand plays the role of a costimulatory molecule and induces activation in APC in association with T cell receptor stimulation by MHC molecules on the APC. In total CD40 ligand has three binding partners: CD40, α5β1 integrin and αIIbβ3. CD40 ligand regulates B cell function by engaging CD40 on the B cell surface. A defect in this gene results in an inability to undergo immunoglobulin class switch and is associated with hyper IgM syndrome.
Molecular Weight:	16.8 kDa
UniProt:	P27548
Pathways:	NF-kappaB Signaling, Production of Molecular Mediator of Immune Response, Cancer Immune Checkpoints

Application Details

Restrictions:	For Research Use only

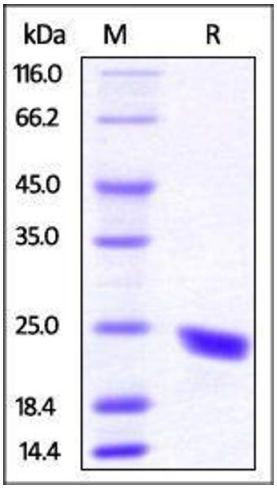
Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C



Binding Studies

Image 1. Immobilized Mouse CD40, Fc Tag with a linear range of 5-20 ng/mL.



SDS-PAGE

Image 2. Mouse CD40 Ligand, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.