Datasheet for ABIN2870589

CD40 Protein (CD40) (AA 21-193) (His tag)

3 Images

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Overview

Quantity:	100 µg
Target:	CD40
Protein Characteristics:	AA 21-193
Origin:	Cynomolgus
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CD40 protein is labelled with His tag.

Product Details

Sequence:	AA 21-193
Characteristics:	This protein carries a polyhistidine tag at the C-terminus. The protein has a calculated MW of 21.1 kDa. The protein migrates as 30-34 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
Alternative Name:	CD40 (CD40 Products)
Background:	CD40 is also known as TNFRSF5, Bp50, CDW40, MGC9013, TNFRSF5 and p50, is a member of

Target Details

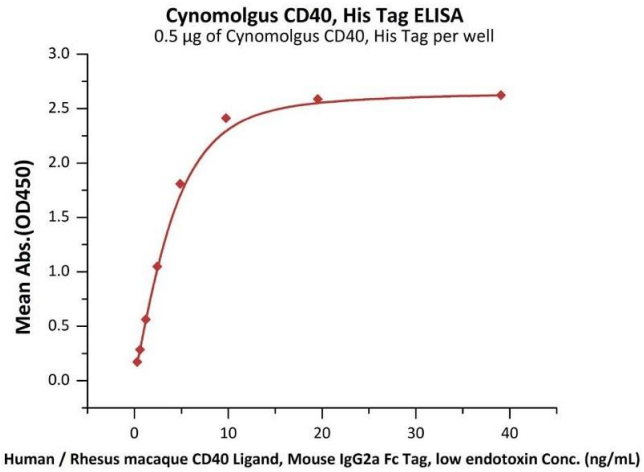
	the TNF receptor superfamily which are single transmembrane-spanning glycoproteins, and plays an essential role in mediating a broad variety of immune and inflammatory responses including T cell-dependent immunoglobulin class switching, memory B cell development, and germinal center formation. CD40 is a costimulatory protein found on antigen presenting cells and is required for their activation. The binding of CD154 (CD40L) on TH cells to CD40 activates antigen presenting cells and induces a variety of downstream effects. CD40 contains 4 cysteine-rich repeats in the extracellular domain, and is expressed in B cells, dendritic cells, macrophages, endothelial cells, and several tumor cell lines. The extracellular domain has the cysteinerich repeat regions, which are characteristic for many of the receptors of the TNF superfamily. Interaction of CD40 with its ligand, CD40L, leads to aggregation of CD40 Molecules,which in turn interact with cytoplasmic components to initiate signaling pathways. Early studies on the CD40-CD40L system revealed its role in humoral immunity. Defects in CD40 result in hyper-IgM immunodeficiency type 3 (HIGM3), an autosomal recessive disorder characterized by an inability of B cells to undergo isotype switching, as well as an inability to mount an antibody-specific immune response, and a lack of germinal center formation.
Molecular Weight:	21.1 kDa
UniProt:	G7PG38
Pathways:	NF-kappaB Signaling, Cellular Response to Molecule of Bacterial Origin, M Phase, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, Cancer Immune Checkpoints

Application Details

Restrictions:	For Research Use only

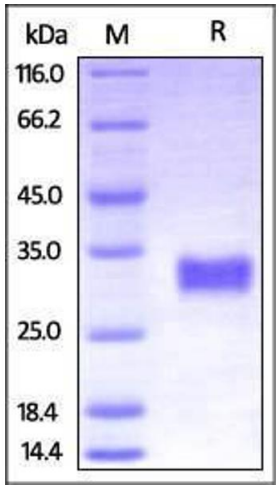
Handling

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



ELISA

Image 1. Immobilized Cynomolgus CD40, His Tag (ABIN2870588,ABIN2870589) at 5 μg/mL (100 μL/well) can bind Human / Rhesus macaque CD40 Ligand, Mouse IgG2a Fc Tag, low endotoxin (ABIN5954903,ABIN6253627) with a linear range of 0.3-5 ng/mL (Routinely tested).



SDS-PAGE

Image 2. Cynomolgus CD40, 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%.

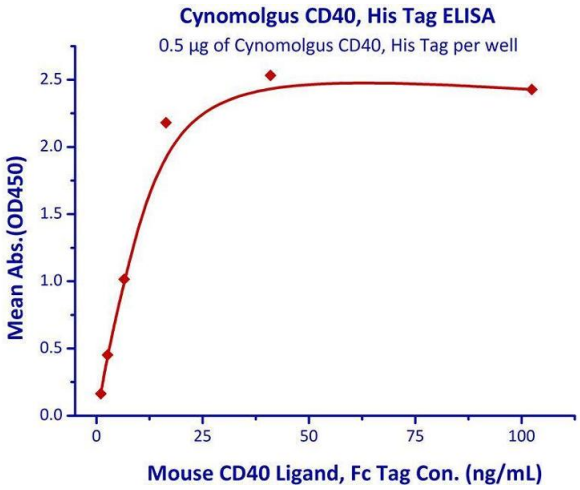


Image 3. Measured by its binding ability in a functional ELISA. Immobilized Cynomolgus CD40, His Tag with a linear range of 1-6.6 ng/mL.