

## Datasheet for ABIN2870789

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





### Overview

| Quantity:                     | 100 μg                                      |
|-------------------------------|---|
| Target:                       | CD40  |
| Protein Characteristics:      | AA 21-193                                   |
| Origin:                       | Rhesus Monkey                               |
| Source:                       | HEK-293 Cells                               |
| Protein Type:                 | Recombinant                                 |
| 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 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-lgM 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

NCBI Accession:

NP 001252791

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

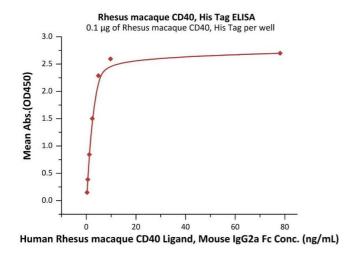
### **Application Details**

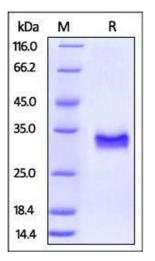
Restrictions:

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 Rhesus macaque CD40, His Tag (ABIN2870788,ABIN2870789) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Human / Rhesus macaque CD40 Ligand, Mouse IgG2a Fc Tag, low endotoxin (ABIN5954903,ABIN6253627) with a linear range of 0.6-5 ng/mL (QC tested).

#### **SDS-PAGE**

**Image 2.** Rhesus macaque 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%.