

# Biotinylated Human CD40/TNFRSF5 Protein

Cat. No. CD4-HM440B

## Description

<b>Source</b>	Recombinant Biotinylated Human CD40/TNFRSF5 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Glu21-Arg193.
<b>Accession</b>	P25942
<b>Molecular Weight</b>	The protein has a predicted MW of 22.1 kDa. Due to glycosylation, the protein migrates to 35-40 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

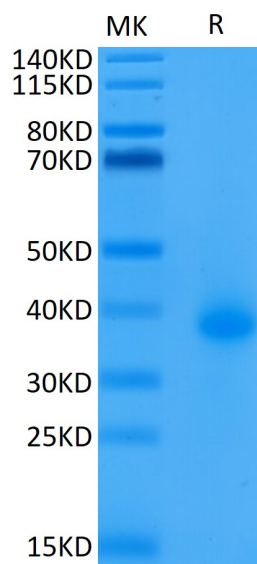
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

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 molecule is a potential target for cancer immunotherapy. There are number of completed and ongoing clinical trials where agonistic anti-CD40 monoclonal antibodies are employed to activate an anti-tumor T cell response via activation of dendritic cells.

## Assay Data

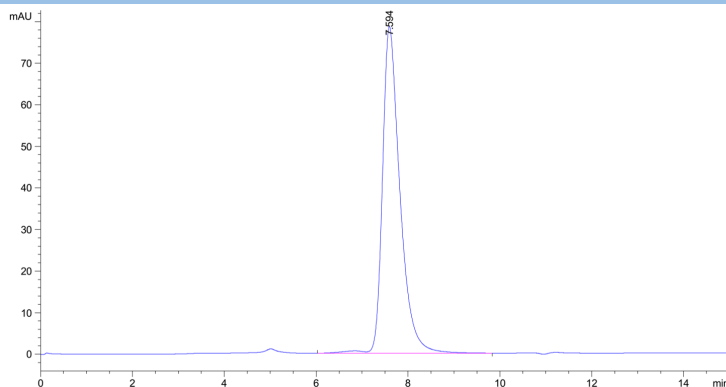
### Bis-Tris PAGE



Biotinylated Human CD40 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

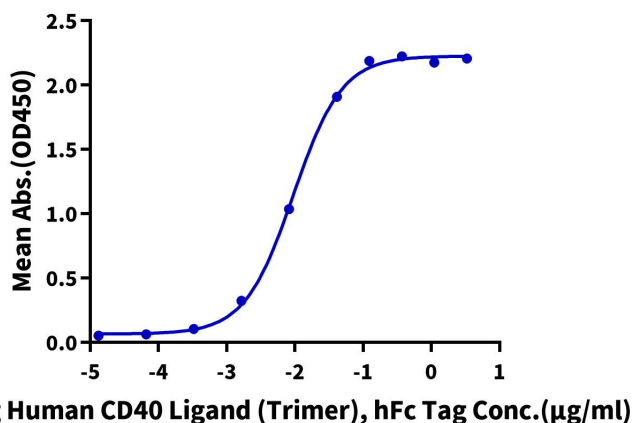


The purity of Biotinylated Human CD40 is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Biotinylated Human CD40, His Tag ELISA**

0.1µg Biotinylated Human CD40, His Tag Per Well

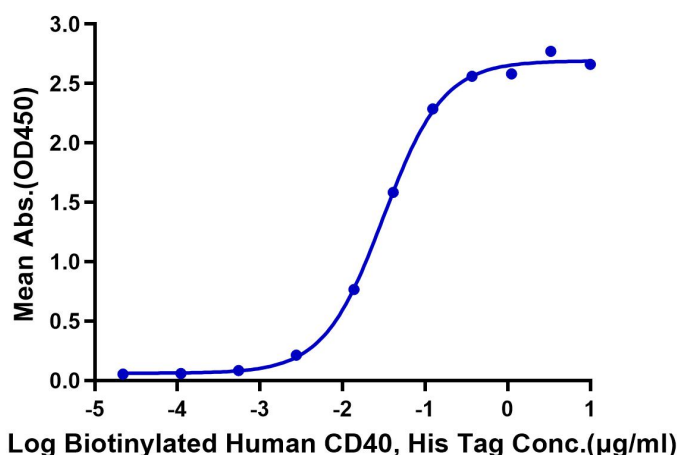


Immobilized Biotinylated Human CD40, His Tag at 1µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Human CD40 Ligand (Trimer), hFc Tag with the EC50 of 9.5ng/ml determined by ELISA (QC test).

ELISA Data

**Biotinylated Human CD40, His Tag ELISA**

0.1µg Anti-CD40 Antibody, hFc Tag Per Well



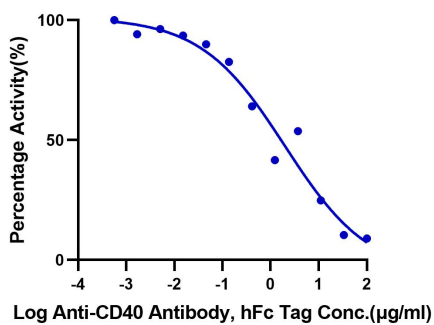
Immobilized Anti-CD40 Antibody at 1µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human CD40, His Tag with the EC50 of 31.3ng/ml determined by ELISA.

Blocking Data

Assay Data

Inhibition of Human CD40 Ligand (Trimer) and CD40 Binding

0.5µg Human CD40 Ligand (Trimer), hFc Tag Per Well



Serial dilutions of Anti-CD40 Antibody were added into Biotinylated Human CD40, His Tag : Human CD40 Ligand (Trimer) , hFc Tag binding reactions. The half maximal inhibitory concentration (IC50) is 2.0ug/ml.