

# Human CD40/TNFRSF5 Protein

Cat. No. CD4-HM240



## Description

Source	Recombinant Human CD40/TNFRSF5 Protein is expressed from HEK293 with hFc tag at the C-Terminus.
	It contains Glu21-Arg193.
Accession	P25942-1
Molecular Weight	The protein has a predicted MW of 45.9 kDa. Due to glycosylation, the protein migrates to 55-65 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

## Formulation and Storage

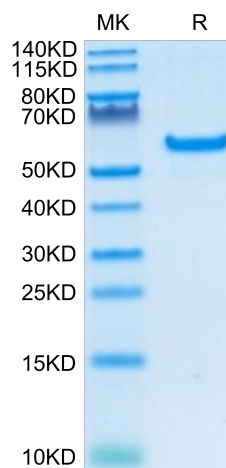
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 24 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.

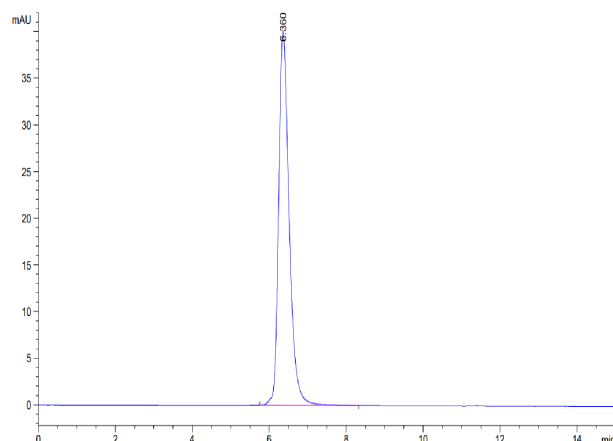
## Assay Data

### Bis-Tris PAGE



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

### SEC-HPLC



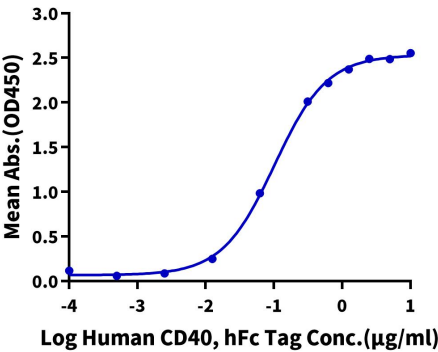
The purity of Human CD40 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

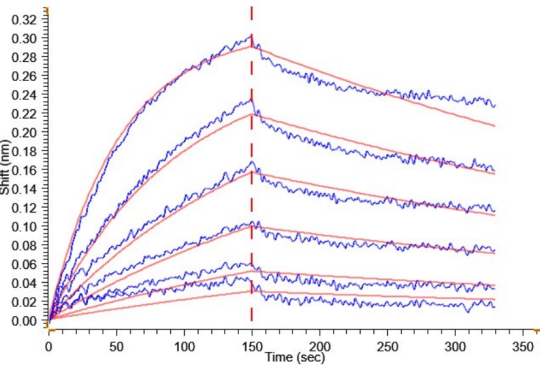
Human CD40, hFc Tag ELISA

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



Immobilized Human/Cynomolgus/Rhesus macaque CD40 Ligand Trimer, His Tag at 5µg/ml (100µl/Well) on the plate. Dose response curve for Human CD40, hFc Tag with the EC50 of 101.8ng/ml determined by ELISA.

BLI Data



Loaded Human CD40, hFc Tag on ProA-Biosensor can bind Human/Cynomolgus/Rhesus macaque CD40 Ligand (Trimer), His-Flag Tag with an affinity constant of 0.23 µM as determined in BLI assay (Gator® Prime).