

# Mouse CD40/TNFRSF5 Protein

Cat. No. CD4-MM140

## Description

<b>Source</b>	Recombinant Mouse CD40/TNFRSF5 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Val24-Arg193.
<b>Accession</b>	P27512-1
<b>Molecular Weight</b>	The protein has a predicted MW of 19.9 kDa. Due to glycosylation, the protein migrates to 30-35 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

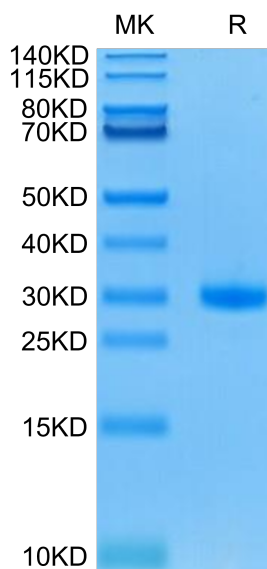
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. 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 3-6 months after reconstitution. 2-8°C for 2-7 days 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

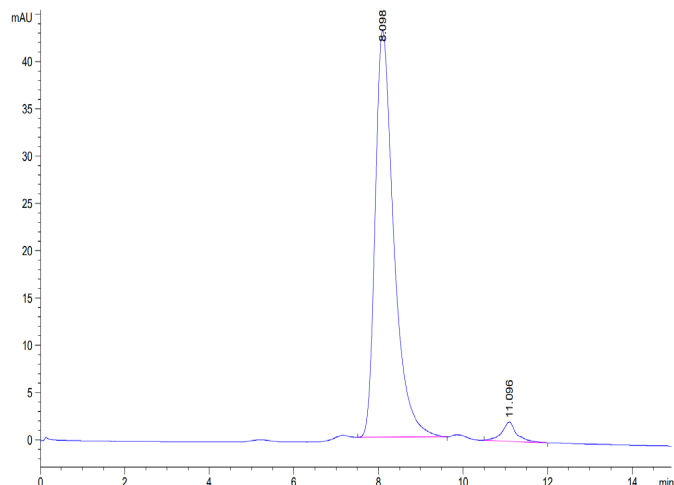
### Bis-Tris PAGE



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

### SEC-HPLC

Assay Data

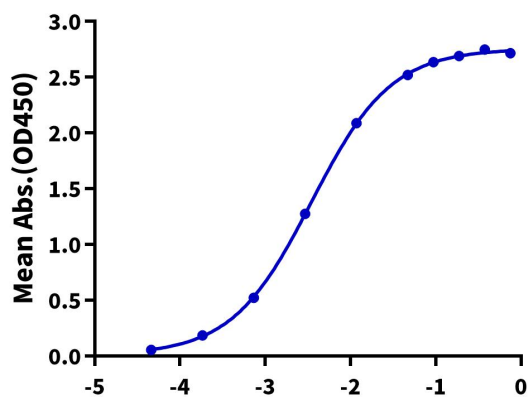


The purity of Mouse CD40 is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Mouse CD40, His Tag ELISA**

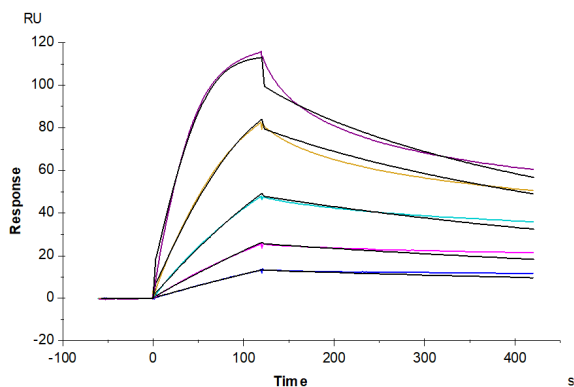
0.2µg Mouse CD40, His Tag Per Well



Immobilized Mouse CD40, His Tag at 2µg/ml (100 µl/well) on the plate. Dose response curve for Mouse CD40 Ligand Trimer, hFc Tag with the EC50 of 3.5 ng/ml determined by ELISA (QC Test).

Log Mouse CD40 Ligand Trimer, hFc Tag Conc.(µg/ml)

SPR Data



Mouse CD40, His Tag immobilized on CM5 Chip can bind Mouse CD40 Ligand, His Tag with an affinity constant of 0.54 nM as determined in SPR assay (Biacore T200).