

# Human/Cynomolgus/Rhesus macaque CD40 Ligand/TNFSF5 Trimer Protein



Cat. No. CDL-HM140

## Description

|                         |   |
|-------------------------|---|
| <b>Source</b>           | Recombinant Human/Cynomolgus/Rhesus macaque CD40 Ligand/TNFSF5 Trimer Protein is expressed from HEK293 with His tag and Flag tag at the N-Terminus. |
|                         | It contains Met113-Leu261 trimer design.  |
| <b>Accession</b>        | P29965(Human) / G7Q1T4(Cynomolgus) / P63304(Rhesus macaque)   |
| <b>Molecular Weight</b> | The protein has a predicted MW of 52.4 kDa, Due to glycosylation, the protein migrates to 55 kDa based on Bis-Tris PAGE result.                     |
| <b>Endotoxin</b>        | Less than 1 EU 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> | Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.   |
| <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 ligand or CD40L, also called CD154, is a protein that is primarily expressed on activated T cells and is a member of the TNF superfamily of molecules. It binds to CD40 (protein) on antigen-presenting cells (APC), which leads to many effects depending on the target cell type. In total CD40L has three binding partners: CD40,  $\alpha 5\beta 1$  integrin and  $\alpha 11\beta 3$ . CD154 acts as a costimulatory molecule and is particularly important on a subset of T cells called T follicular helper cells.

## Assay Data

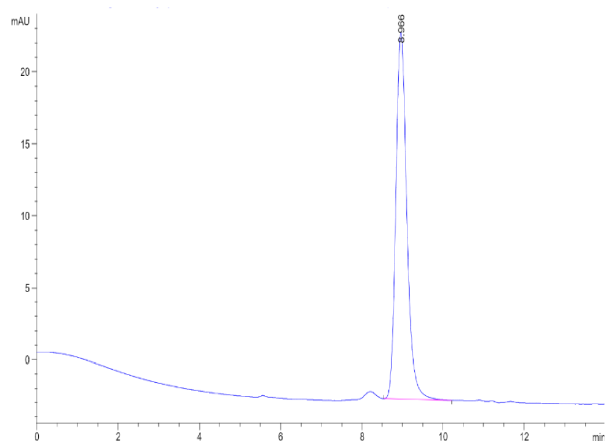
### Bis-Tris PAGE



Human/Cynomolgus/Rhesus macaque CD40 Ligand Trimer on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data



The purity of Human/Cynomolgus/Rhesus macaque CD40 Ligand Trimer is greater than 95% as determined by SEC-HPLC.

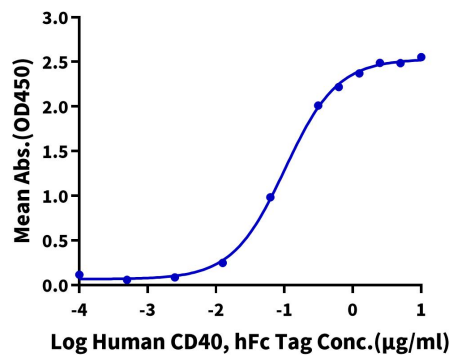
Cat. No. CDL-HM140

Assay Data

ELISA Data

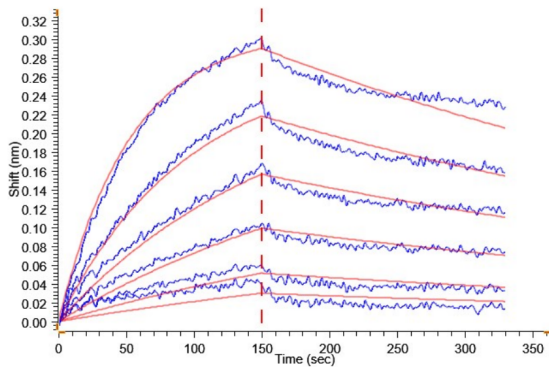
Human CD40 Ligand Trimer, His Tag ELISA

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).