

Human CD40 Ligand/TNFSF5 Trimer Protein

Cat. No. CDL-HM240

Description

Source	Recombinant Human CD40 Ligand/TNFSF5 Trimer Protein is expressed from HEK293 with monomeric hFc tag at the N-Terminus. It contains Met113-Leu261.
Accession	P29965
Molecular Weight	The protein has a predicted MW of 74.9 kDa. Due to glycosylation, the protein migrates to 75-80 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

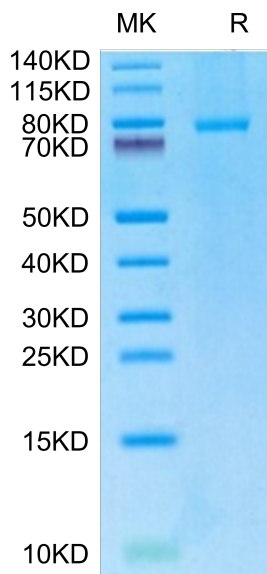
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-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 $\alpha \text{IIb}\beta 3$. CD154 acts as a costimulatory molecule and is particularly important on a subset of T cells called T follicular helper cells.

Assay Data

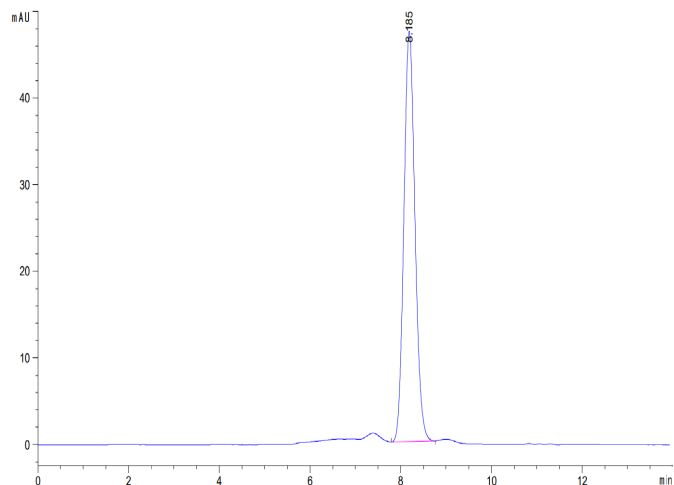
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

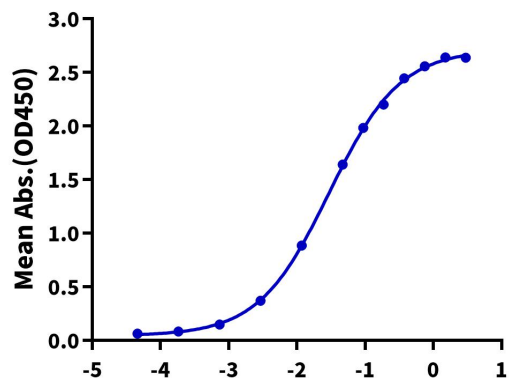


The purity of Human CD40 Ligand (Trimer) is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human CD40 Ligand (Trimer), hFc Tag ELISA

0.2µg Human CD40, His Tag Per Well

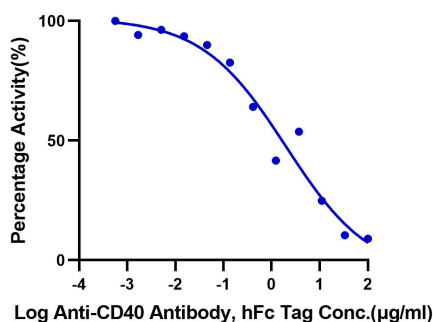


Immobilized Human CD40, His Tag at 2µg/ml (100µl/Well) on the plate. Dose response curve for Human CD40 Ligand (Trimer), hFc Tag with the EC50 of 29.8ng/ml determined by ELISA (QC Test).

Blocking 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 2.0µg/ml.