

Mouse CD40 Ligand/TNFSF5 Protein

Cat. No. CDL-MM140

Description

Source	Recombinant Mouse CD40 Ligand/TNFSF5 Protein is expressed from HEK293 with His tag at the N-Terminus. It contains Met112-Leu260.
Accession	P27548
Molecular Weight	The protein has a predicted MW of 17.50 kDa. Due to glycosylation, the protein migrates to 20-25 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

Formulation and Storage

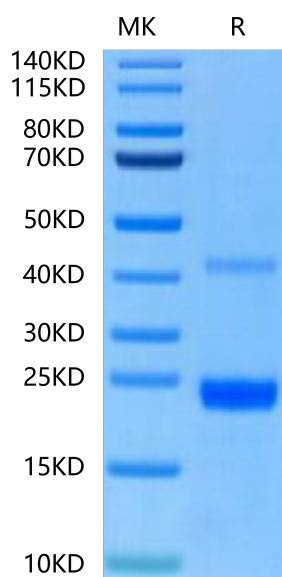
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized 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 $\alpha 1\text{Ib}\beta 3$. 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



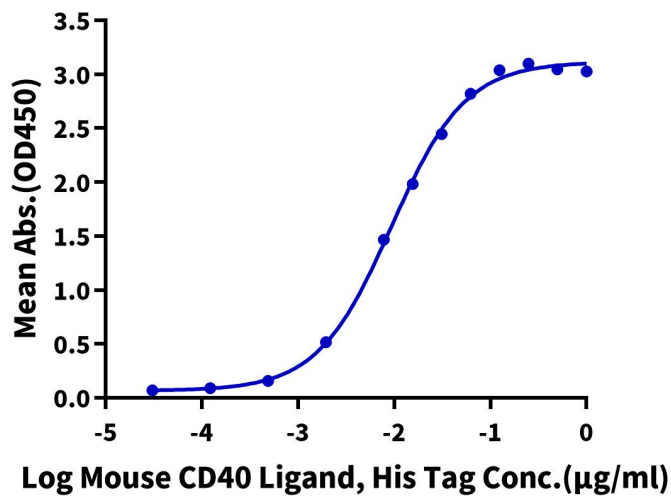
Mouse CD40 Ligand on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

ELISA Data

Assay Data

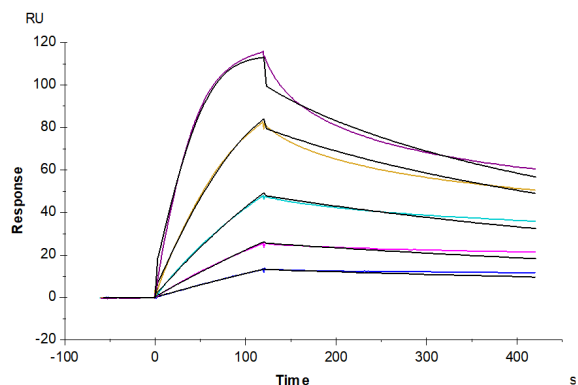
Mouse CD40 Ligand, His Tag ELISA

0.1µg Human CD40, hFc Tag Per Well



Immobilized Human CD40, hFc Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Mouse CD40 Ligand, His Tag with the EC50 of 9.4ng/ml determined by ELISA (QC Test).

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).