

Synonym

CD70,CD27LG,TNFSF7,TNFSF7G,CD27L

Source

Human CD27 Ligand Protein, His,Flag Tag (CDL-H52Da) is expressed from human 293 cells (HEK293). It contains AA Ser 52 - Pro 193 (Accession # [P32970-1](#)) trimer Design.  
Predicted N-terminus: His

Molecular Characterization

This protein carries a polyhistidine tag at the N-terminus, followed by a flag tag.  
The protein has a calculated MW of 49.3 kDa. The protein migrates as 50-60 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.  
>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.  
Contact us for customized product form or formulation.

Reconstitution

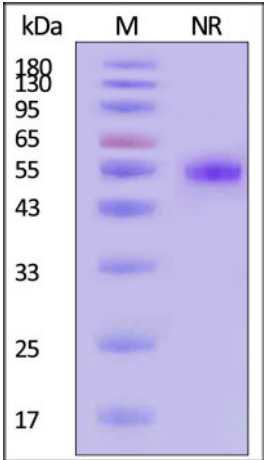
Please see Certificate of Analysis for specific instructions.  
*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.  
*Please avoid repeated freeze-thaw cycles.*  
This product is stable after storage at:

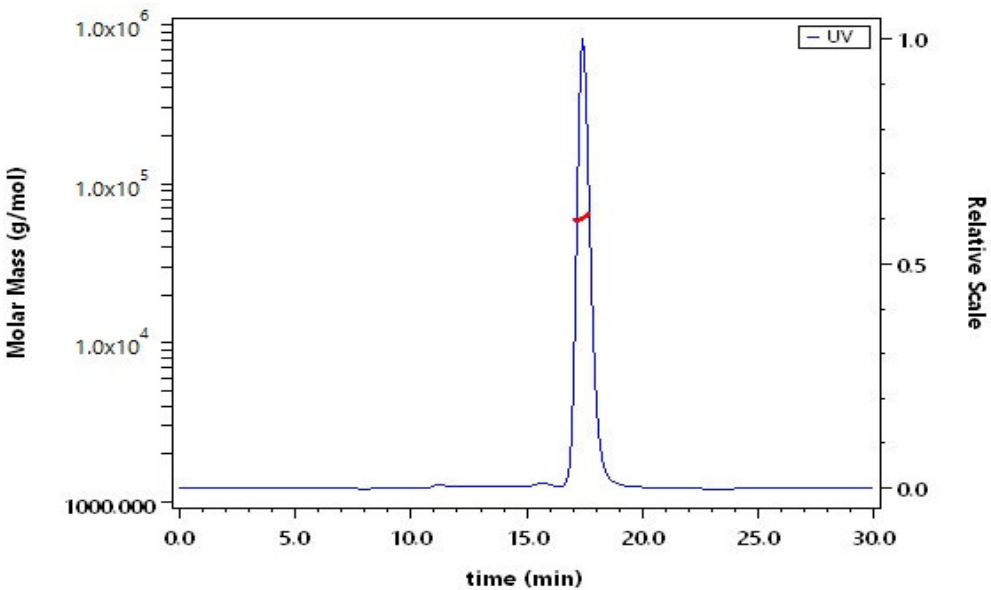
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human CD27 Ligand Protein, His,Flag Tag on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

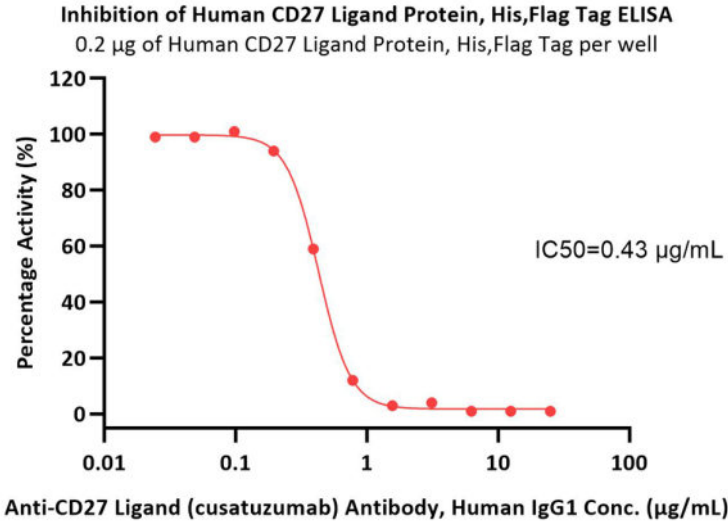
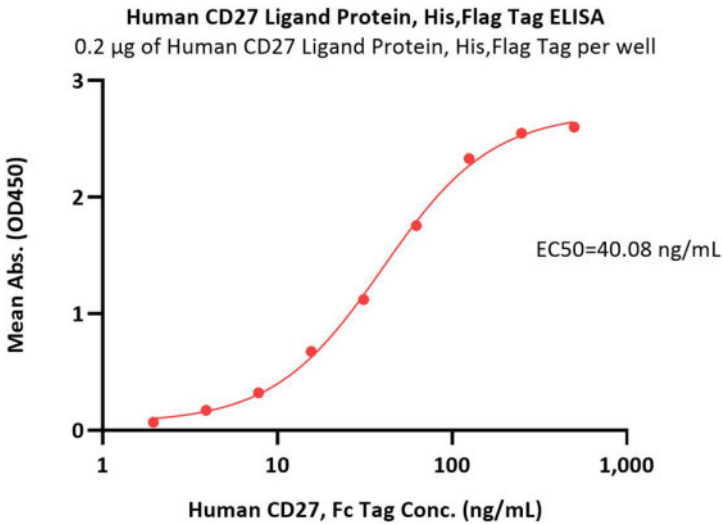
SEC-MALS



The purity of Human CD27 Ligand Protein, His,Flag Tag (Cat. No. CDL-H52Da) is more than 90% and the molecular weight of this protein is around 55-70 kDa verified by SEC-MALS.  
[Report](#)

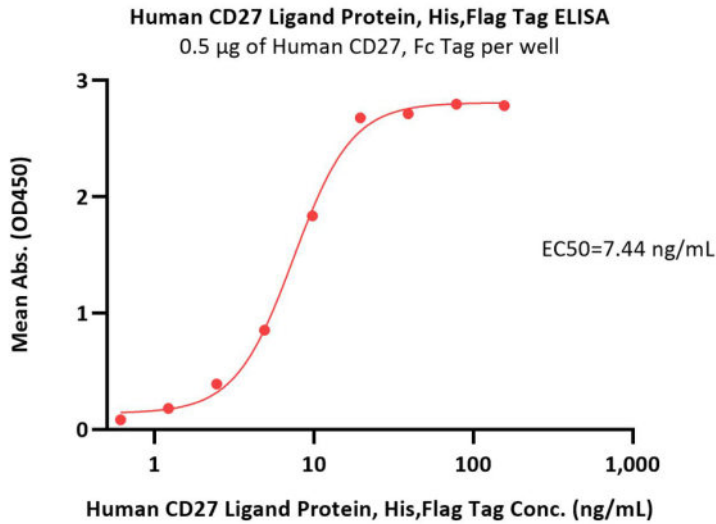
Bioactivity-ELISA





Immobilized Human CD27 Ligand Protein, His,Flag Tag (Cat. No. CDL-H52Da) at 2 µg/mL (100 µL/well) can bind Human CD27, Fc Tag (Cat. No. CD7-H5254) with a linear range of 2-125 ng/mL (QC tested).

Serial dilutions of Anti-CD27 Ligand (cusatuzumab) Antibody, Human IgG1 were added into Human CD27 Ligand Protein, His,Flag Tag (Cat. No. CDL-H52Da) : Biotinylated Human CD27, Fc,Avitag (Cat. No. TN7-H82F6) binding reactions. The half maximal inhibitory concentration (IC50) is 0.42856 µg/mL (Routinely tested).



Immobilized Human CD27, Fc Tag (Cat. No. CD7-H5254) at 5 µg/mL (100 µL/well) can bind Human CD27 Ligand Protein, His,Flag Tag (Cat. No. CDL-H52Da) with a linear range of 0.6-20 ng/mL (Routinely tested).

Background

Cluster of Differentiation 70 (CD70) is also known as CD27 ligand (CD27L / CD27LG), TNFSF7, TNFSF7G, is a type II transmembrane glycoprotein belonging to the TNF superfamily (TNFSF) and is a surface antigen found on activated T-and B-lymphocytes and mature dendritic cells. Binding of CD70 to its receptor CD27 induces in priming, effector functions, differentiation and memory formation of T-cells, and thus is involved in the biological processes including T-cell activation, the proliferation of costimulated T-cells, as well as the generation of cytolytic T-cells. CD70 on T cells provides costimulatory signals that are required for T cell proliferation, clonal expansion and the promotion of effector T cell formation. CD70 on mouse B cell has been shown to inhibit terminal differentiation of activated B cells into plasma cells and enhances commitment to memory B cell responses. CD70 induces proliferation and IFNγ production, on NK cells.

