

### Synonym

CD70,CD27LG,TNFSF7,TNFSF7G,CD27L

### Source

Biotinylated Mouse CD27 Ligand, His,Avitag (CDL-M82Qb) is expressed from human 293 cells (HEK293). It contains AA Gln 47 - Pro 195 (Accession # [O55237-1](#)).

Predicted N-terminus: His

### Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 20.1 kDa. The protein migrates as 28-32 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Biotinylation

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

### Biotin:Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### Purity

>95% as determined by SDS-PAGE.

### Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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

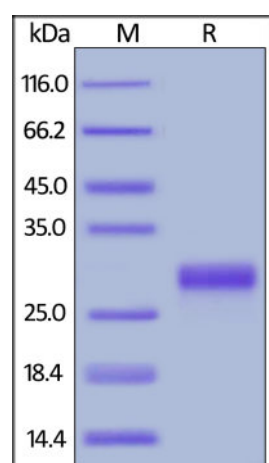
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

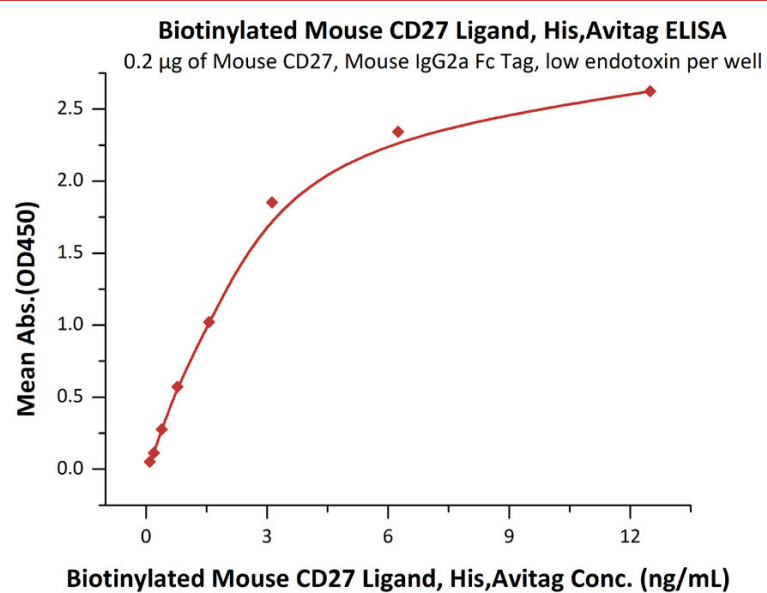
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### SDS-PAGE



Biotinylated Mouse CD27 Ligand, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

### Bioactivity-ELISA



Immobilized Mouse CD27, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. [CD7-M5252](#)) at 2 µg/mL (100 µL/well) can bind Biotinylated Mouse CD27 Ligand, His,Avitag (Cat. No. [CDL-M82Qb](#)) with a linear range of 0.1-3 ng/mL (QC 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 IFN $\gamma$  production, on NK cells.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.