

### Synonym

CD70,CD27LG,TNFSF7,TNFSF7G,CD27L

## Source

Human CD27 Ligand Protein, Mouse IgG2a Fc Tag(CDL-H525a) is expressed from human 293 cells (HEK293). It contains AA Gln 39 - Pro 193 (Accession # P32970-1).

Predicted N-terminus: Glu

#### **Molecular Characterization**

mFc(Glu 98 - Lys 330) CD27 Ligand(Gln 39 - Pro 193) P01863 P32970-1

This protein carries a mouse IgG2a Fc tag at the N-terminus

The protein has a calculated MW of 44.0 kDa. The protein migrates as 50-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than  $0.1 \ EU$  per  $\mu g$  by the LAL method.

## **Purity**

>85% as determined by SDS-PAGE.

### **Formulation**

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 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**

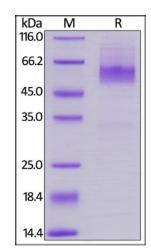
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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**



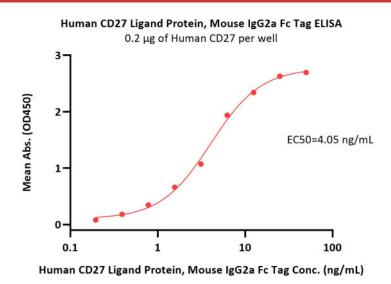
Human CD27 Ligand Protein, Mouse IgG2a Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 85%.

# **Bioactivity-ELISA**

# Human CD27 Ligand / CD70 Protein, Mouse IgG2a Fc Tag, low endotoxin







Immobilized Human CD27, His Tag (Cat. No. CD7-H522b) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human CD27 Ligand Protein, Mouse IgG2a Fc Tag (Cat. No. CDL-H525a) with a linear range of 0.1-8 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 invloved 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 IFNy production, on NK cells.

## **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.