

## Synonym

CD70,CD27LG,TNFSF7,TNFSF7G,CD27L

#### Source

Alexa Fluor 647-Labeled Human CD27 Ligand Protein, His Tag (CDL-HA246) is produced via conjugation of AF647 to Human CD27 Ligand Protein, His Tag with a new generation site-specific technology under Star Staining labeling platform. Human CD27 Ligand Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA Ser 52 - Pro 193 (Accession # P32970-1). Predicted N-terminus: His

#### **Molecular Characterization**

This protein carries a polyhistidine tag at the N-terminus

The protein has a calculated MW of 64.2 kDa.

## Conjugate

AF647

Excitation Wavelength: 640 nm

Emission Wavelength: 672 nm

### **Endotoxin**

Less than 1.0 EU per μg by the LAL method.

# **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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.

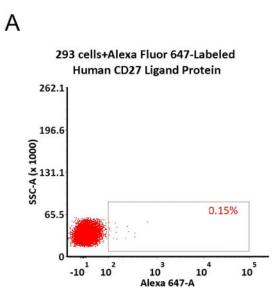
Please protect from light and avoid repeated freeze-thaw cycles.

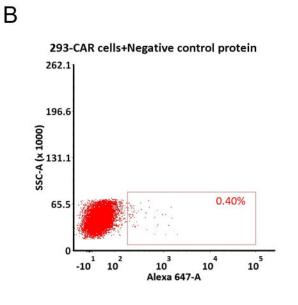
This product is stable after storage at:

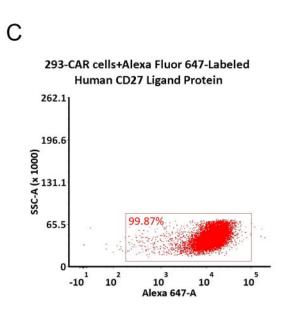
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **Evaluation of CAR expression**

FACS Analysis of Anti-CD27 Ligand CAR Expression







5e5 of anti-CD27 Ligand CAR-293 cells were stained with 100 μL of 3 μg/mL of Alexa Fluor 647-Labeled Human CD27 Ligand Protein, His Tag (Cat. No. CDL-HA246) and negative control protein respectively (Fig. C and B), and non-transfected 293 cells were used as a control (Fig. A), Alexa Fluor 647 signal was used to evaluate the binding activity (QC tested).

## **Background**

# Alexa Fluor™ 647-Labeled Human CD27 Ligand / CD70 Protein, His TagStar Staining

Catalog # CDL-HA246



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 IFNγ 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.