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

Catalog # CDL-HA246

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

Purity

>90% as determined by SDS-PAGE.

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.

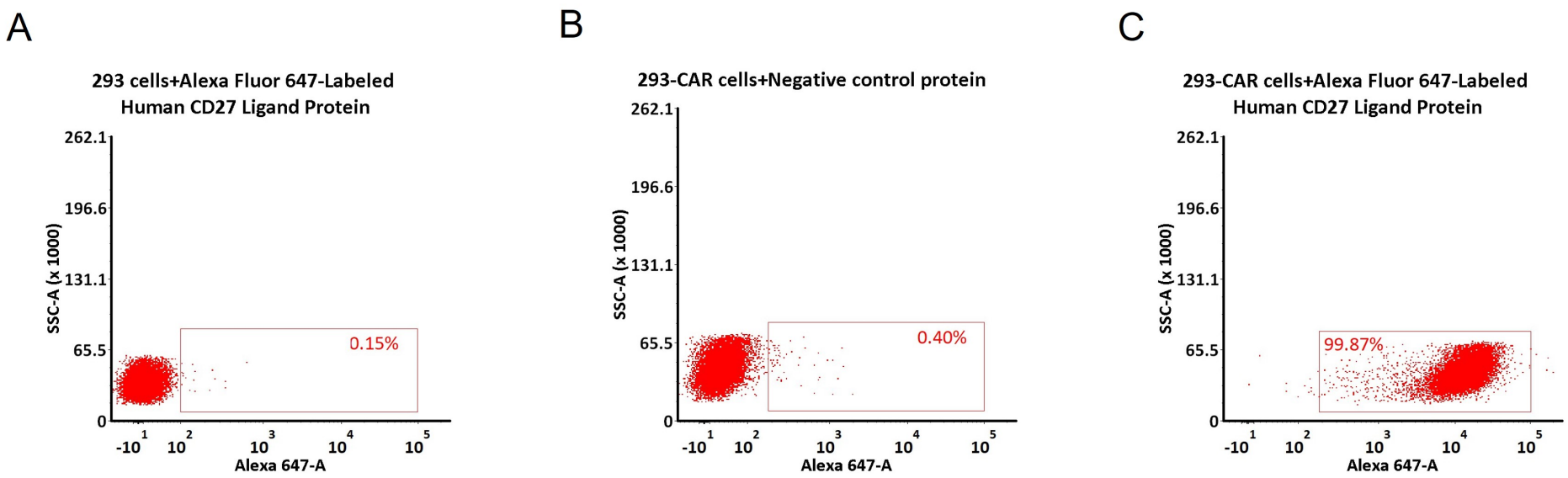
Please protect from light and avoid repeated freeze-thaw cycles.

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

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.