

Synonym

CD70,CD27LG,TNFSF7,TNFSF7G,CD27L

Source

FITC-Labeled Human CD27 Ligand, His,Flag Tag(CDD-HF2D4) 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, followed by a flag tag.
The protein has a calculated MW of 49.3 kDa. The protein migrates as 50-55 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC
Excitation source: 488 nm spectral line, argon-ion laser
Excitation Wavelength: 488 nm
Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

Protein Ratio

The FITC to protein molar ratio is 2-4.

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.

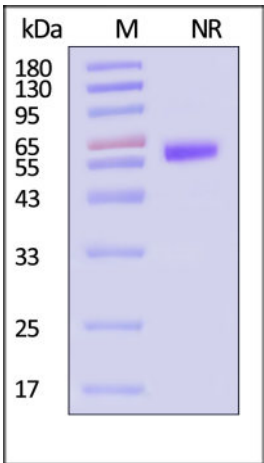
Storage

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:

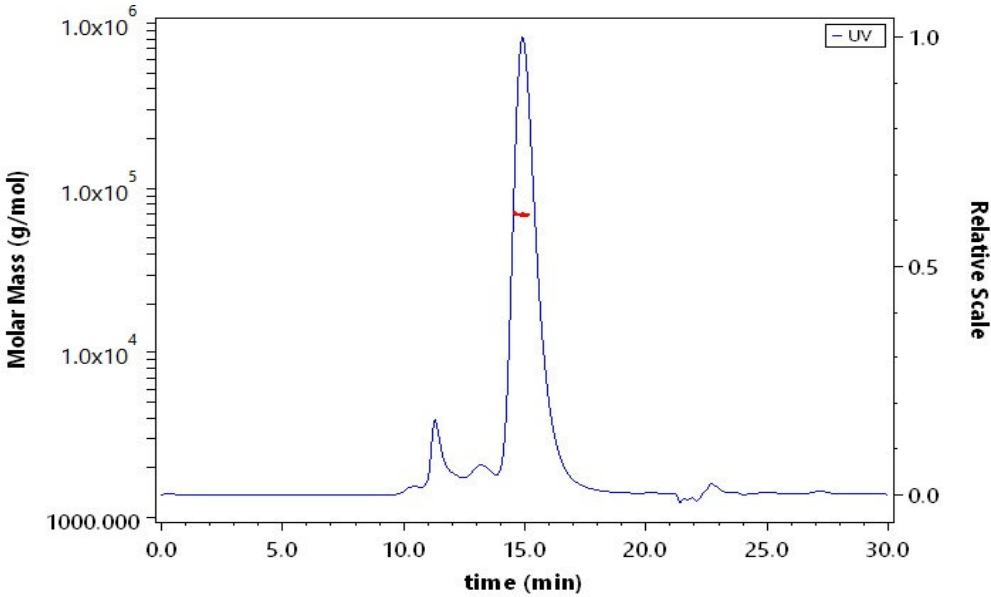
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



FITC-Labeled Human CD27 Ligand, His,Flag Tag on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity

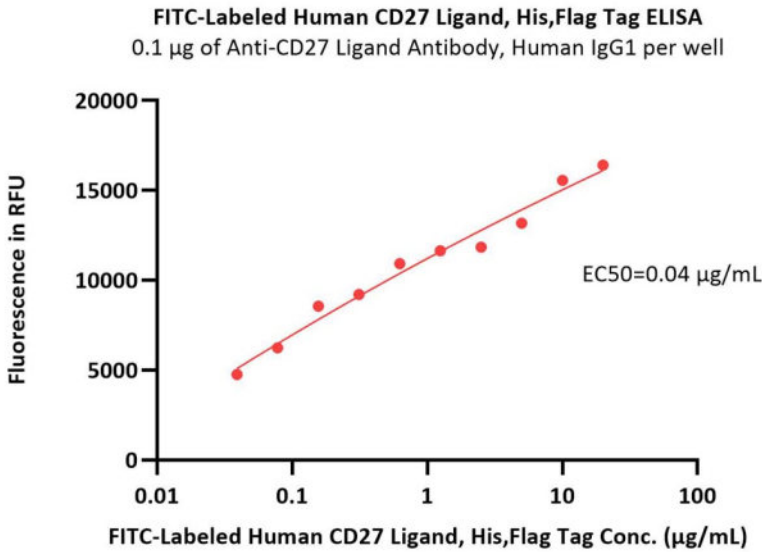
SEC-MALS



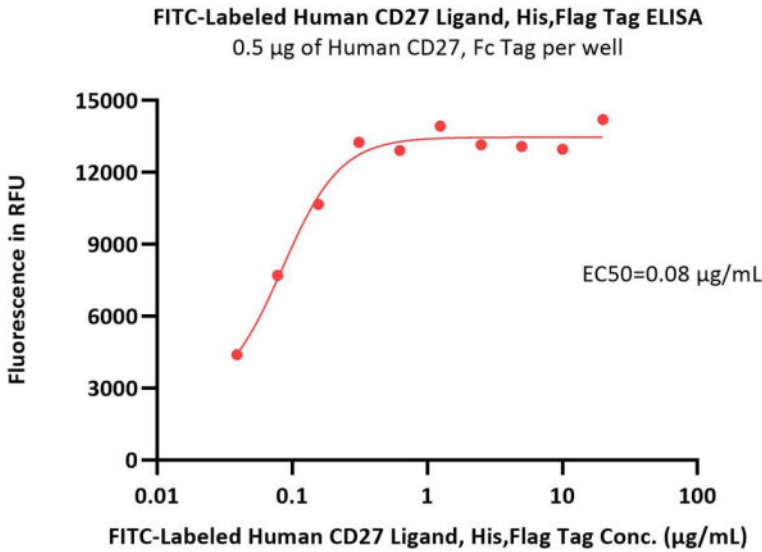
of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

The purity of FITC-Labeled Human CD27 Ligand, His,Flag Tag (Cat. No. CDD-HF2D4) is more than 85% and the molecular weight of this protein is around 55-74 kDa verified by SEC-MALS.
[Report](#)

Bioactivity-ELISA



Immobilized Anti-CD27 Ligand Antibody, Human IgG1 at 1 µg/mL (100 µL/well) can bind FITC-Labeled Human CD27 Ligand, His,Flag Tag (Cat. No. CDD-HF2D4) with a linear range of 0.039-0.156 µg/mL (QC tested).



Immobilized Human CD27, Fc Tag (Cat. No. CD7-H5254) at 5 µg/mL (100 µL/well) can bind FITC-Labeled Human CD27 Ligand, His,Flag Tag (Cat. No. CDD-HF2D4) with a linear range of 0.039-0.156 µg/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 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.

