Synonym

4-1BB Ligand,TNFSF9,CD137L

Source

Human 4-1BB Ligand (71-254) Protein, Fc Tag, premium grade(41L-H5269) is expressed from human 293 cells (HEK293). It contains AA Arg 71 - Glu 254 (Accession # P41273-1).
Predicted N-terminus: Pro
It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Molecular Characterization

Fc(Pro 100 - Lys 330) P01857	4-1BB Ligand(Arg 71 - Glu 254) P41273-1

This protein carries a human IgG1 Fc tag at the N-terminus.

The protein has a calculated MW of 87.5 kDa. The protein migrates as 95 kDa±5 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per μg by the LAL method.

Protein A

<5 ppm of protein tested by ELISA.

Host Cell Protein

<0.5 ng/μg of protein tested by ELISA.

Host Cell DNA

<0.02 ng/μg of protein tested by qPCR.

Sterility

Negative

Mycoplasma

Negative.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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.

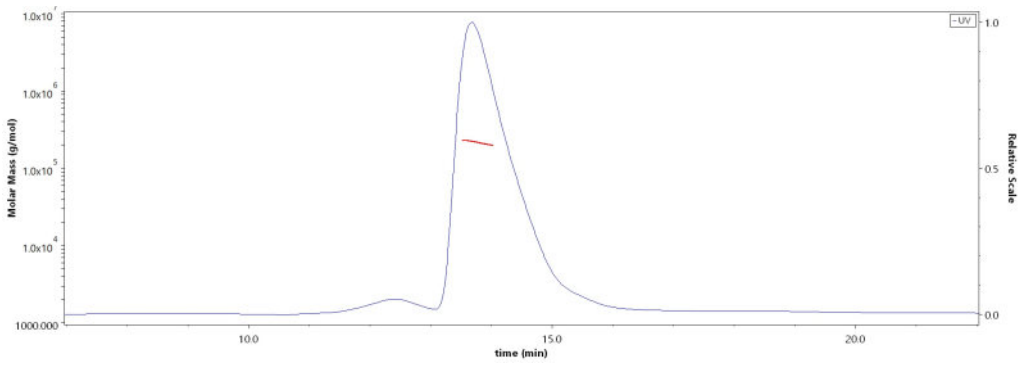
Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

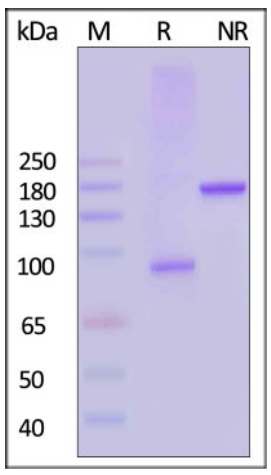
- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

SEC-MALS



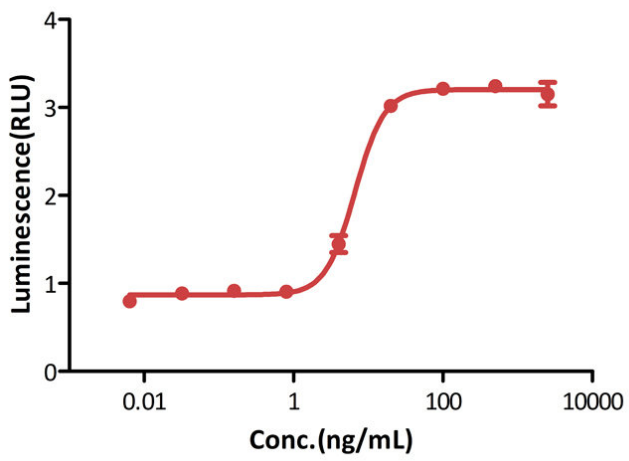
Discounts, Gifts, and more!



Human 4-1BB Ligand (71-254) Protein, Fc Tag, premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

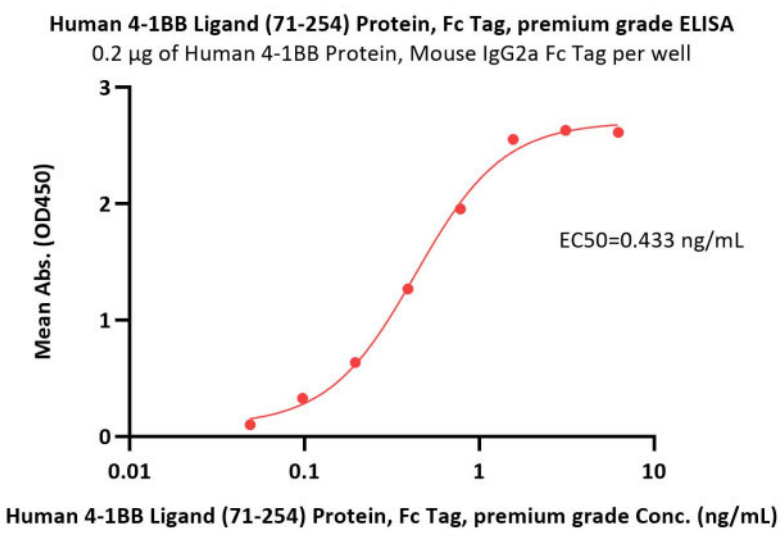
The purity of Human 4-1BB Ligand (71-254) Protein, Fc Tag, premium grade (Cat. No. 41L-H5269) is more than 90% and the molecular weight of this protein is around 195-235 kDa verified by SEC-MALS.
Report

Bioactivity-Bioactivity CELL BASE



Human 4-1BB Ligand (71-254) Protein, Fc Tag, premium grade (Cat. No. 41L-H5269) induce IL-8 secretion in HT1080 human CD137 cell line. The specific activity of Human 4-1BB Ligand (71-254) Protein, Fc Tag, premium grade is ＞1.00*10^5 U/mg (QC tested).

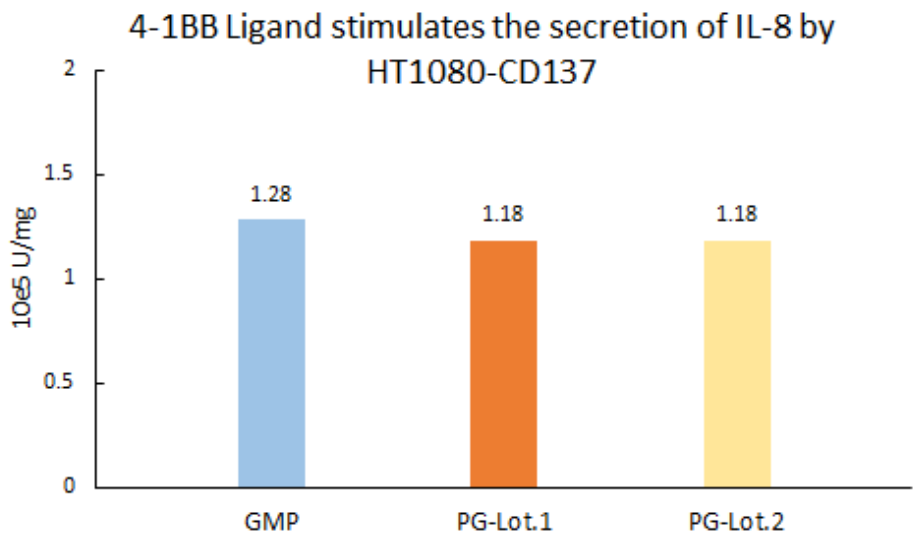
Bioactivity-ELISA



Immobilized Human 4-1BB Protein, Mouse IgG2a Fc Tag (Cat. No. 41B-H5256) at 2 μg/mL (100 μL/well) can bind Human 4-1BB Ligand (71-254)

Protein, Fc Tag, premium grade (Cat. No. 41L-H5269) with a linear range of 0.049-0.781 ng/mL (QC tested).

Bioactivity-Stability



The Cell based assay shows batch-to-batch consistency between Acro's GMP and PG 4-1BB Ligand.

Background

Tumor necrosis factor ligand superfamily member 9 (4-1BBL) is also known as 4-1BB ligand, CD137L or TNFSF9, which is a cytokine that binds to TNFRSF9. 4-1BBL is the high affinity ligand of 4-1BB. 4-1BBL induces the proliferation of activated peripheral blood T-cells. Also, 4-1BBL may have a role in activation-induced cell death (AICD). Furthermore, 4-1BBL may play a role in cognate interactions between T-cells and B-cells/macrophages. As for diseases, 4-1BBL is involved in cancers, infectious diseases and autoimmune diseases.

Clinical and Translational Updates