Synonym

4-1BB Ligand,TNFSF9,CD137L

Source

Human 4-1BB Ligand, Fc Tag (41L-H5257) is expressed from human 293 cells (HEK293). It contains AA Ala 50 - Glu 254 (Accession # NP_003802).
Predicted N-terminus: Ala 50

Molecular Characterization

4-1BB Ligand(Ala 50 - Glu 254) NP_003802	Fc(Glu 99 - Lys 330) P01857

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

The protein has a calculated MW of 47.5 kDa. The protein migrates as 52 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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.

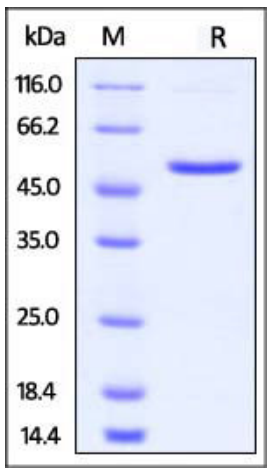
Storage

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

Please avoid repeated freeze-thaw cycles.

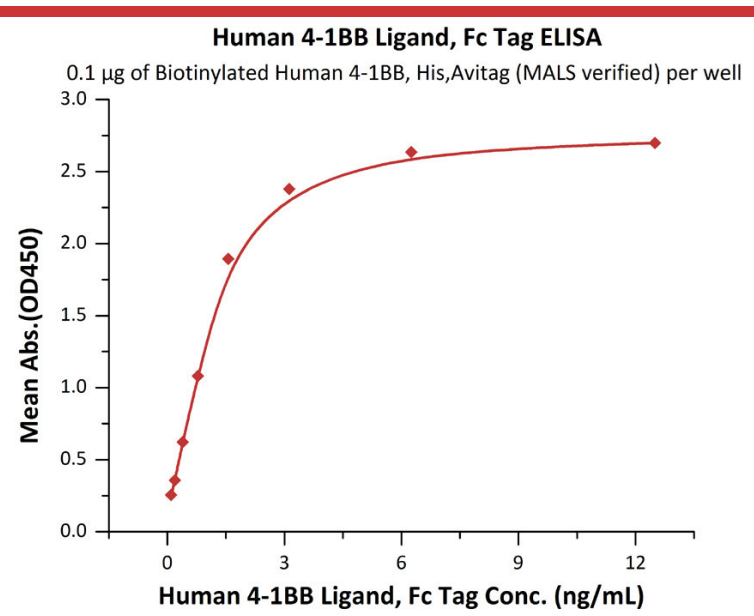
This product is stable after storage at:
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

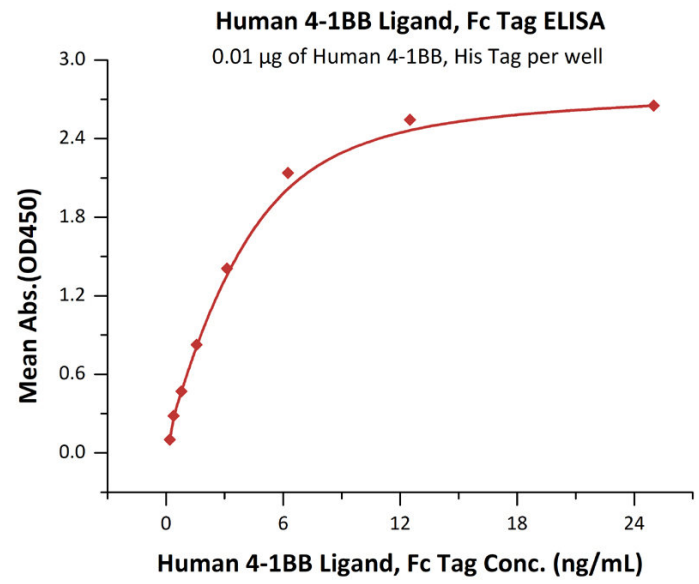


Human 4-1BB Ligand, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

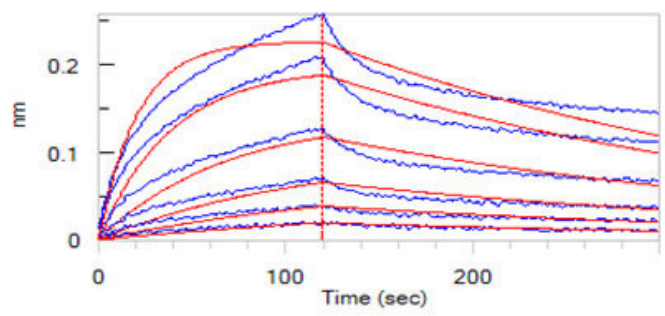


Immobilized Biotinylated Human 4-1BB, His,Avitag™(MALS verified) (Cat. No. 41B-H82E6) at 1 µg/mL (100 µL/well) on Recombinant Streptavidin (Cat. No. STN-N5116) precoated (0.5µg/well) plate, can bind Human 4-1BB Ligand, Fc Tag (Cat. No. 41L-H5257) with a linear range of 0.1-2 ng/mL (QC tested).

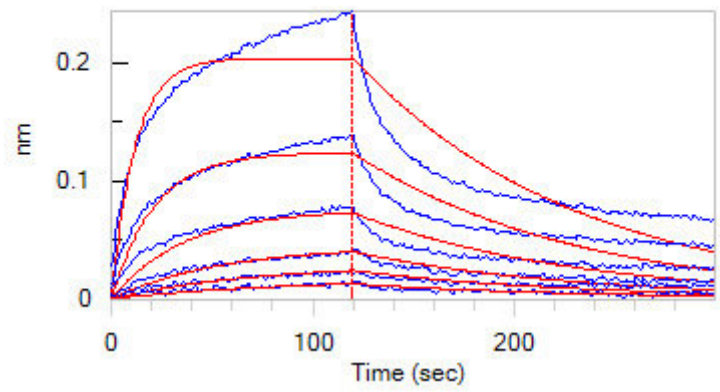


Immobilized Human 4-1BB, His Tag (Cat. No. 41B-H5227) at 0.1 µg/mL (100 µL/well) can bind Human 4-1BB Ligand, Fc Tag (Cat. No. 41L-H5257) with a linear range of 0.2-6 ng/mL (Routinely tested).

Bioactivity-BLI



Loaded Human 4-1BB Ligand, Fc Tag (Cat. No. 41L-H5257) on Protein A Biosensor, can bind Human 4-1BB, His Tag (Cat. No. 41B-H5227) with an affinity constant of 15.9 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human 4-1BB Ligand, Fc Tag (Cat. No. 41L-H5257) on Protein A Biosensor, can bind Human 4-1BB, His Tag (Cat. No. 41B-H52Hc) with an affinity constant of 24 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

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.

References

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