

Synonym

4-1BB Ligand, TNFSF9, CD137L

Source

Mouse 4-1BB Ligand, Fc Tag(41L-M5257) is expressed from human 293 cells (HEK293). It contains AA Arg 104 - Glu 309 (Accession # NP_033430). Predicted N-terminus: Arg 104

Molecular Characterization

4-1BB Ligand(Arg 104 - Glu 309) Fc(Glu 99 - Lys 330)
NP_033430 P01857

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

The protein has a calculated MW of 49.0 kDa. The protein migrates as 60-65 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

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

Tris with Glycine, Arginine and NaCl, pH7.5 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

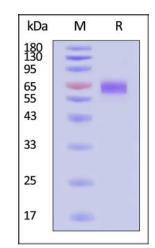
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

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

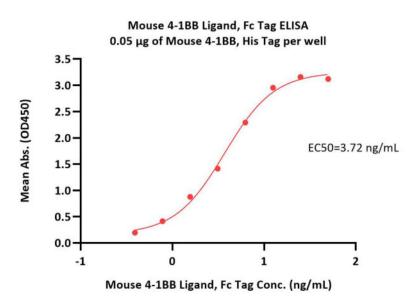


Mouse 4-1BB Ligand, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA

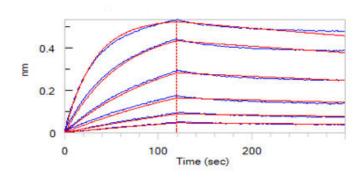




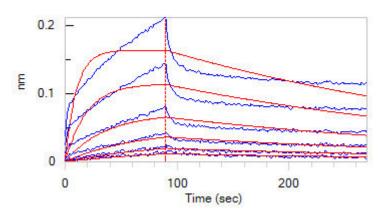


Immobilized Mouse 4-1BB, His Tag (Cat. No. 41B-M52H7) at 0.5 μ g/mL (100 μ L/well) can bind Mouse 4-1BB Ligand, Fc Tag (Cat. No. 41L-M5257) with a linear range of 0.4-6 ng/mL (QC tested).

Bioactivity-BLI



Loaded Mouse 4-1BB Ligand, Fc Tag (Cat. No. 41L-M5257) on Protein A Biosensor, can bind Mouse 4-1BB, His Tag (Cat. No. 41B-M52H7) with an affinity constant of 4.8 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Mouse 4-1BB Ligand, Fc Tag (Cat. No. 41L-M5257) on Protein A Biosensor, can bind Rat 4-1BB, His Tag (Cat. No. 41B-R52H3) with an affinity constant of 74.3 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.

Clinical and Translational Updates

