

**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) NP_033430	Fc(Glu 99 - Lys 330) P01857
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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 64-80 kDa 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**

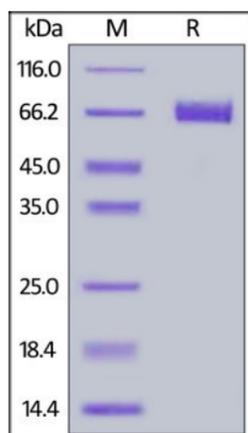
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

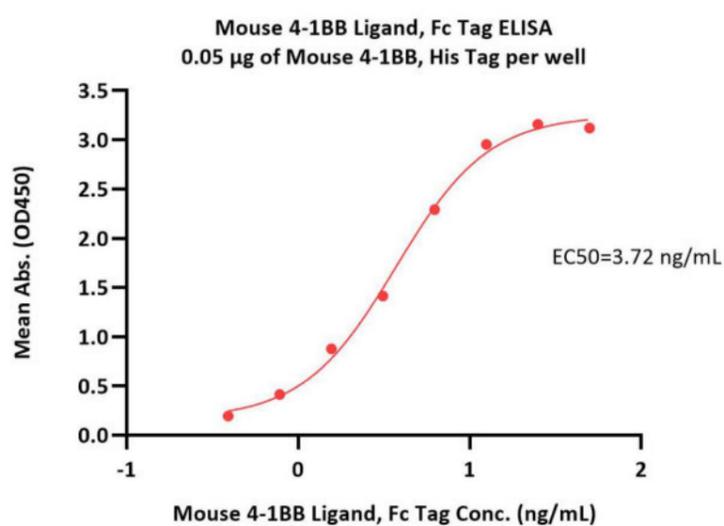
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**



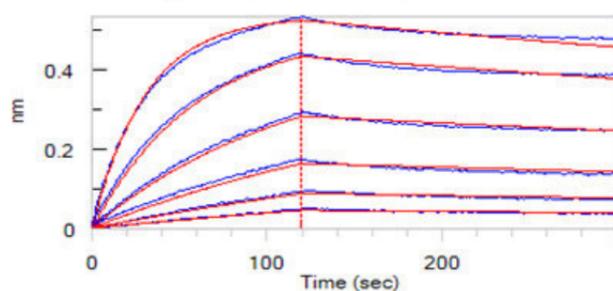
Mouse 4-1BB Ligand, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA**

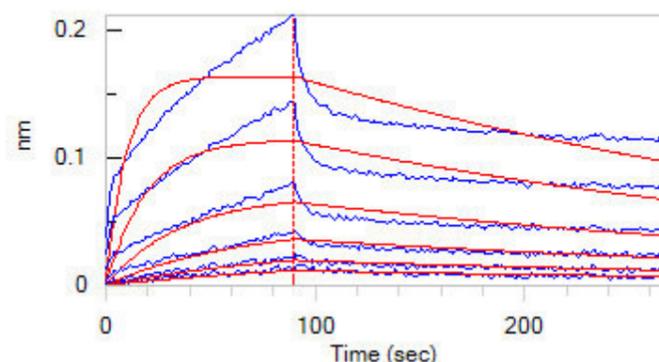


Immobilized Mouse 4-1BB, His Tag (Cat. No. 41B-M52H7) at 0.5 µg/mL (100 µL/well) can bind Mouse 4-1BB Ligand, Fc Tag (Cat. No. 41L-M5257) with a linear range of 0.4-6 ng/mL (QC tested).

**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**

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.