

Synonym

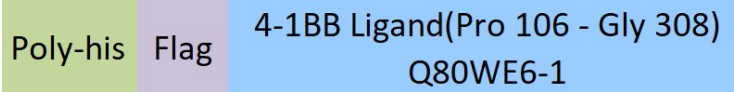
4-1BB Ligand,TNFSF9,CD137L

Source

Rat 4-1BB Ligand His,Flag Tag(41L-R52D3) is expressed from human 293 cells (HEK293). It contains AA Pro 106 - Gly 308 (Accession # [Q80WE6-1](#)).

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 72.3 kDa. The protein migrates as 95-115 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% 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

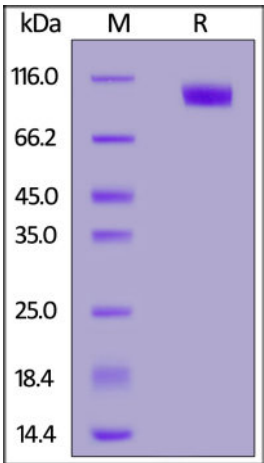
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

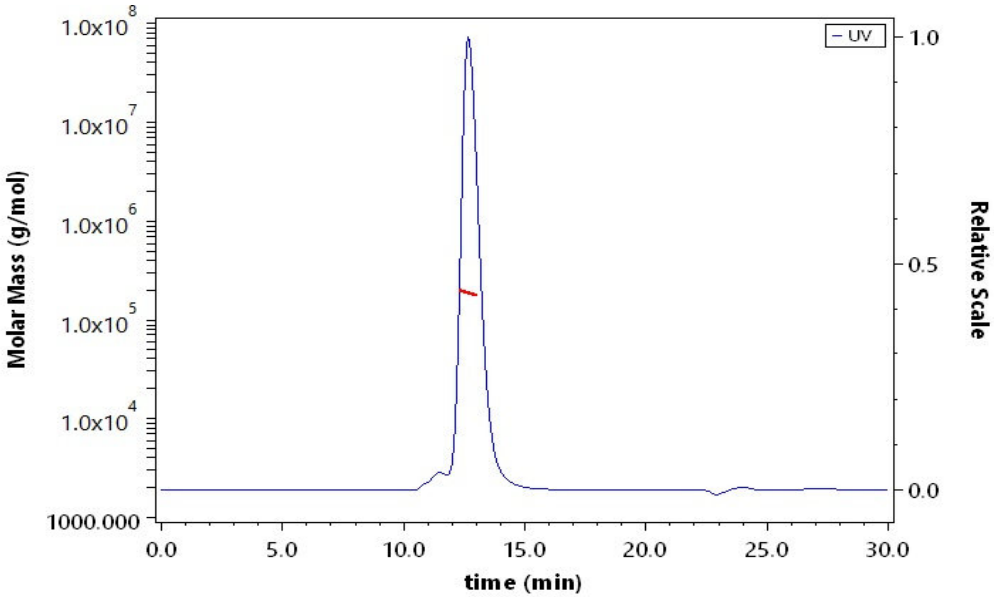
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



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

SEC-MALS



The purity of Rat 4-1BB Ligand His,Flag Tag (Cat. No. 41L-R52D3) is more than 95% and the molecular weight of this protein is around 169-206 kDa verified by SEC-MALS.

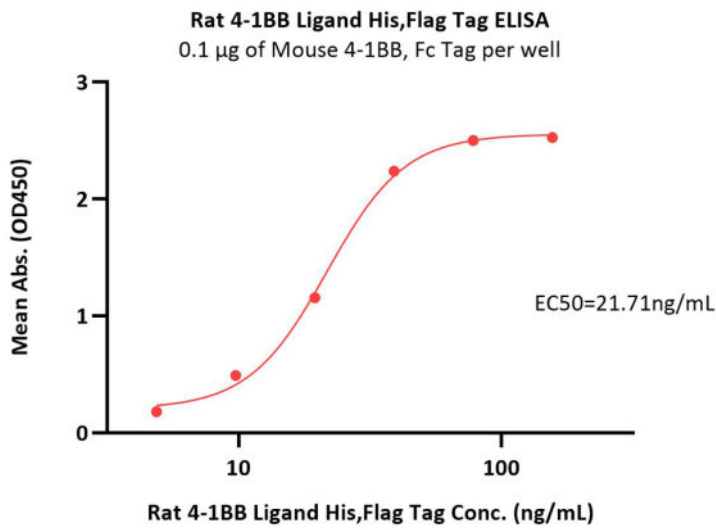
[Report](#)

Bioactivity-ELISA



Rat 4-1BB Ligand / TNFSF9 Protein, His,Flag Tag (MALS verified)

Catalog # 41L-R52D3



Immobilized Mouse 4-1BB, Fc Tag (Cat. No. 41B-M5258) at 1 µg/mL (100 µL/well) can bind Rat 4-1BB Ligand His,Flag Tag (Cat. No. 41L-R52D3) with a linear range of 5-39 ng/mL (QC 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.

