

Mouse 4-1BBL / CD137L / TNFSF9 Protein (His Tag)

Catalog Number: 50067-M07H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

Tnfsf9, 4-1BB-L, 4-1BBL, AI848817, Cd137l, Ly63l

Protein Construction:

A DNA sequence encoding the extracellular domain (Arg 104-Glu 309) of mouse TNFSF9 (NP_033430.1) precursor was expressed with a N-terminal polyhistidine tag.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Bio-Activity

Measured by its binding ability in a functional ELISA . Immobilized recombinant mouse 4-1BB Ligand at 20 µg/ml (100ul/well) can bind human 4-1BB with a linear range of 15.6-500 ng/ml .

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: His

Molecular Mass:

The secreted recombinant mouse TNFSF9 consists of 222 amino acids and has a calculated molecular mass of 25 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 40-45 kDa protein in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

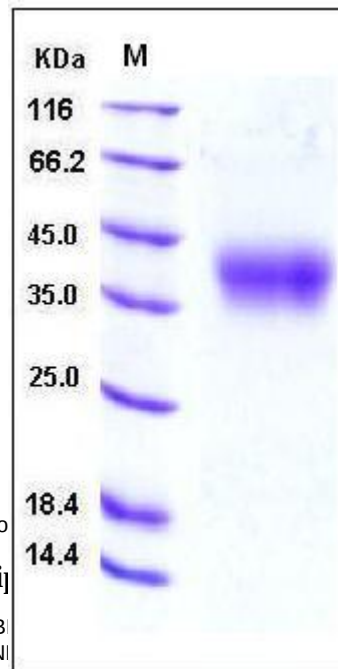
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution

products.

Protein Description:

4-1BB ligand (4-1BB) is a member of the tumor necrosis factor (TNF) superfamily (CDw137) expressed on activated T cells. It acts with 4-1BB, a costimulatory signal for T cell activation and growth. Mouse 4-1BBL is a 309 amino acid (aa) residues protein with an 82 aa N-terminal cytoplasmic domain, a 21 aa transmembrane domain and a 206 aa C-terminal extracellular domain. The extracellular domain of 4-1BBL has a tertiary structure similar to that of other TNFSF members, but shares only low aa sequence homology (14 - 16%). Murine 4-1BBL shares 36% aa sequence identity with its human counterpart which is detected in both T and B cells of human peripheral blood. 4-1BB ligand interacts with 4-1BB and co-stimulates the latter to secrete cytokines and to proliferate, and also this interaction modulates the effector CD4+ T cell-driven immune response and cytokine production in colitis without affecting regulatory T cell function.

References

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3. Zhou, Z. et al., 1995, Immunol. Lett. 45 (1-2): 67-73.
4. Futagawa, T. et al., 2002, Int Immunol. 14 (3): 275-286.
5. Yoshida, H. et al., 2003, Cancer Immunol Immunother. 52 (2): 97-106.
6. Maerten, P. et al., 2006, Clin Exp Immunol. 143 (2): 228-236.

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