

Human 4-1BBL / CD137L Protein (Fc Tag, ECD)

Catalog Number: 15693-H01H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

4-1BBL, CD137L

Protein Construction:

A DNA sequence encoding the human TNFSF9 (NP_003802.1) (Arg71-Glu254) was expressed with the Fc region of human IgG1 at the N-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE.

Endotoxin:

< 1.0 EU per µg 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: Glu

Molecular Mass:

The recombinant human TNFSF9 consists 444 amino acids and predicts a molecular mass of 47.9 kDa.

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.

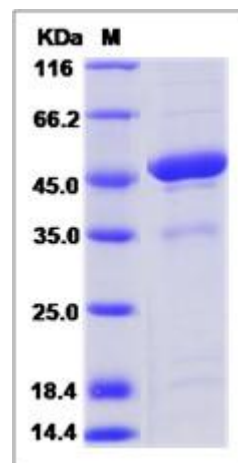
Usage Guide

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 instructions are sent along with the products.

Protein Description

4-1BB ligand (4-1BBL), also known as TNFSF9, is a member of the tumor necrosis factor (TNF) superfamily (TNFSF), and interacts with 4-1BB (CDw137) expressed on activated T cells and delivers 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 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

1. Goodwin, R.G. et al., 1993, Eur. J. Immunol. 23: 2631-2641.
2. Alderson, M.R. et al., 1994, Eur. J. Immunol. 24: 2219-2227.
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.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>