Data Sheet (Cat.No.TMPY-06831)

4-1BB Ligand/TNFSF9 Protein, Mouse, Recombinant (hFc)

General Information

Synonyms:	4-1BB-L;Ly63l;4-1BBL;Cd137l;tumor necrosis factor (ligand) superfamily, member 9; AI848817
Protein Construction:	Arg104-Glu309
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	NP_033430
Molecular Weight:	49.7 kDa (predicted); 65-75 kDa (reducing conditions due to glycosylation)

QC Testing

Biological Activity:	Immobilized Recombinant Mouse TNFRSF9 / CD137 / 4-1BB Protein (soluble form, His Tag) at 2μg/mL (100μL/well) can bind Recombinant Mouse 4-1BB Ligand/TNFSF9 Protein (Fc Tag) , the EC50 is 2-6 ng/mL.
Purity:	≥ 95 % as determined by SDS-PAGE. ≥ 95 % as determined by SEC-HPLC.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

4-1BB ligand is the high affinity ligand of 4-1BB, also known as CD137L or TNFSF9. It is shown to be a type II surface glycoprotein belonging to the TNF superfamily. Expression of 4-1BBL is restricted to APCs, such as dendritic cells, macrophages, and activated B cells. Members of the TNF-TNF receptor superfamily have been shown to play critical roles in regulating cellular activation, differentiation and apoptosis. Several studies have reported that 4-

1BBL/4-1BB interaction provided a co-stimulatory signal to T cells, and increased T cell proliferation and cytokines production. In addition, 4-1BBL is involved in cancers, infectious diseases and autoimmune diseases.Cancer ImmunotherapyCo-stimulatory Immune Checkpoint TargetsImmune CheckpointImmune Checkpoint Detection: AntibodiesImmune Checkpoint Detection: ELISA AntibodiesImmune Checkpoint Detection: FCM AntibodiesImmune Checkpoint Detection: ICC AntibodiesImmune Checkpoint TargetsImmunotherapyTargeted Therapy

Reference

Cheung CT, (2007) Neutralizing anti-4-1BBL treatment improves cardiac function in viral myocarditis. Lab Invest. 87 (7): 651-61.

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