

# Product datasheet for TP728295M

## OriGene Technologies, Inc.

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## Recombinant 4-1BBL (4-1BB ligand), Mouse

#### **Product data:**

**Product Type:** Recombinant Proteins

**Description:** Recombinant 4-1BBL (4-1BB ligand), Mouse

Species: Mouse Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

 $MRTEPRPALTITTSPNLGTRENNADQVTPVSHIGCPNTTQQGSPVFAKLLAKNQASLCNTTLNWHSQDG\\ AGSSYLSQGLRYEEDKKELVVDSPGLYYVFLELKLSPTFTNTGHKVQGWVSLVLQAKPQVDDFDNLALTVE\\$ 

LFPCSMENKLVDRSWSQLLLLKAGHRLSVGLRAYLHGAQDAYRDWELSYPNTTSFGLFLVKPDNPWERSPRINGER (CONTROL OF CONTROL OF CONTROL

with polyhistidine tag at the C-terminus.

Tag: His Tag (C-term)

**Predicted MW:** The protein has a calculated MW of 23.9 kDa. The protein migrates as 24 kDa under reducing

condition (SDS-PAGE analysis).

**Purity:** >95% as determined by SDS-PAGE.

Buffer: The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 7.4.

**Bioactivity:** Measure by its ability to induce IL-2 secretion in mouse T cells in the presence of the anti-CD3

antibody. The ED₅₀ for this effect is <0.05 µg/mL.

**Endotoxin:** <0.1 EU per 1 μg of the protein by the LAL method.

**Reconstitution Method:** Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

lyophilized protein in sterile  $H_2O$  to a concentration not less than 100  $\mu$ g/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

**Applications:** Cell culture

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: P41274

**Synonyms:** 4-1BB, 4-1BB-, 4-1BB-L, 4-1BBL, Al848817, Cd137l, Ly6, Ly63l,tumor necrosis factor

(ligand) superfamily, member 9, Tnfsf9

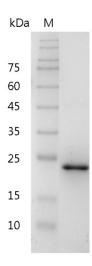




## **Summary:**

4-1BB ligand (4-1BBL) is a type II transmembrane protein that is part of the tumor necrosis factor (TNF) ligand family. As an inducible co-stimulatory molecule, it presents on several antigen presenting cell (APC) types, including B cells, macrophages and DCs. The interactions between 4-1BB and 4-1BBL trigger pleiotropic effects on the immune response including antigen presenting process, proliferation of CD4 and CD8 positive T-cells, as well as cytokine secretion from T-cells through NFκB, c-Jun, and p38 downstream signal pathways activation. Therefore, 4-1BB and 4-1BBL are recently used for the immunotherapy of cancer.

# **Product images:**



SDS- PAGE analysis of recombinant mouse 41BBL