

# Human CellExp™ 4-1BB Ligand / TNFSF9, Human recombinant

**CATALOG NO:** 9240-10 10 µg  
9240-25 25 µg

**ALTERNATE NAMES:** 4-1BB Ligand, TNFSF9, CD137L

**SOURCE:** HEK 293 cells (Ala 50 - Glu 254)

**PURITY:** > 95% by SDS-PAGE

**MOL. WEIGHT:** This protein is fused with human IgG1 Fc tag at C terminus and the protein has a calculated MW of 47.4 kDa. The predicted N-terminus is Ala 50. The protein migrates as 52 kDa in SDS-PAGE under reducing conditions.

**ENDOTOXIN LEVEL:** < 1.0 EU per 1µg of protein (determined by LAL method)

**FORM:** Lyophilized

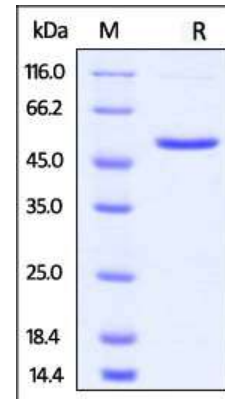
**FORMULATION:** Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Generally Mannitol or Trehalose is added as a protectant before lyophilization.

**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

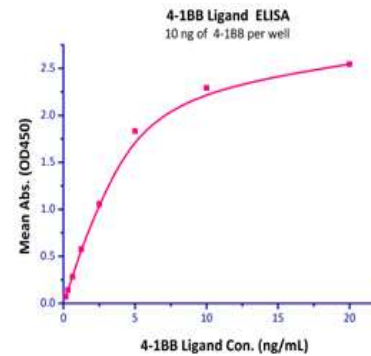
**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

**DESCRIPTION:** 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.

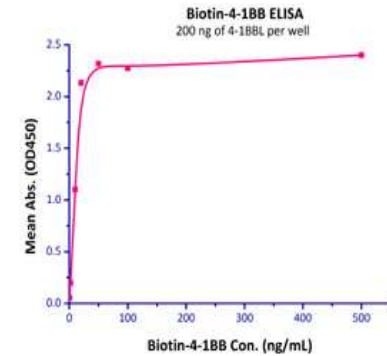
**BIOLOGICAL ACTIVITY:** Measured by its binding ability in a functional ELISA. Immobilized Human 4-1BB, His Tag at 100 ng/mL (100 µl/well), can bind Human 4-1BB Ligand, Fc Tag with a linear of 0.1-2.5 ng/ml and immobilized Human 4-1BB Ligand, Fc Tag at 2 µg/ml (100 µl/well), can bind Biotinylated Human 4-1BB, Fc Tag with a linear of 0.5-20 ng/ml.



The purity of Human 4-1BB Ligand, Fc Tag was determined by SDS-PAGE under reducing condition and staining overnight with Coomassie Blue.



Immobilized Human 4-1BB, His Tag at 100 ng/mL (100 µl/well), can bind Human 4-1BB Ligand, Fc Tag with a linear of 0.1-2.5 ng/ml.



Immobilized Human 4-1BB Ligand, Fc Tag at 2µg/mL (100 µl/well), can bind Biotinylated Human 4-1BB, Fc Tag with a linear of 0.5-20 ng/mL.

## RELATED PRODUCT:

- Human CellExp™ CCL6, mouse recombinant (Cat. No. 7226-10, -50)
- Human CellExp™ CD155, human recombinant (Cat. No. 7462-10, -50)
- Human CellExp™ CD160/BY55, human recombinant (Cat. No. 7386-10, -50)
- Human CellExp™ CD166/ALCAM, human recombinant (Cat. No. 7437-10, -50)
- Human CellExp™ CD172A / SIRP, human recombinant (Cat. No. 7506-10, -50)
- Human CellExp™ CD33 / SIGLEC-3, human recombinant (Cat. No. 7370-10, -50)
- Human CellExp™ CD47, human recombinant (Cat. No. 7385-10, -50)

**FOR RESEARCH USE ONLY! Not to be used on humans.**