

## 4-1BB/CD137/TNFRSF9

Catalog # PVGS1545

## **Product Information**

Primary Accession Q07011
Species Human

Sequence Leu24-Gln186

**Purity** > 95% as analyzed by SDS-PAGE

Endotoxin Level

**Biological Activity** Measured by its binding ability in a ligand-receptor binding ELISA. When

recombinant 4-1BB/CD137/TNFRSF9, hFc, Human is Immobilized at 1.0 □g/ml (100 □/well), the concentration of recombinant human 4-1BB Ligand that produces 50% optimal binding response is found to be approximately

5.0-15.0 ng/ml.

Expression System CHO

**Formulation** Lyophilized from a 0.2 Im filtered solution in PBS.

**Reconstitution** It is recommended that this vial be briefly centrifuged prior to opening to

bring the contents to the bottom. Reconstitute the lyophilized powder in

ddH<sub>2</sub>O or PBS up to 100 ☐g/ml.

**Storage & Stability** Upon receiving, this product remains stable for up to 6 months at lower than

-70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw

cycles.

## **Additional Information**

Gene ID 3604

Other Names Tumor necrosis factor receptor superfamily member 9, 4-1BB ligand receptor,

CDw137, T-cell antigen 4-1BB homolog, T-cell antigen ILA, CD137, TNFRSF9,

CD137, ILA

**Target Background** 4-1BB(CD137) is a member of the tumor necrosis factor (TNF) receptor family.

Mature human 4-1BB consists of a 163 amino acid extracellular domain (ECD) with four TNFR cysteine (Fich repeats, a 27 aa transmembrane segment, and a 42 aa cytoplasmic domain; 4-1BB (CD137) is expressed as a disulfide-linked homodimer on various populations of activated T cell including CD4<sup>+</sup>, CD8<sup>+</sup>, memory CD8<sup>+</sup>, NKT, and regulatory T cells as well as on myeloid and mast cell progenitors, dendritic cells, mast cells, and bacterially infected osteoblasts. It binds with high affinity to the transmembrane 4-1BB Ligand/TNFSF9 which is expressed on antigen presenting cells and myeloid progenitor cells. This

interaction co stimulates the proliferation, activation, and/or survival of the 4-1BB expressing cell. It can also enhance the activation-induced cell death of repetitively stimulated T cells.

## **Protein Information**

Name TNFRSF9

Synonyms CD137, ILA

**Function** Receptor for TNFSF9/4-1BBL. Conveys a signal that enhances CD8(+) T-cell

survival, cytotoxicity, and mitochondrial activity, thereby promoting immunity

against viruses and tumors (Probable).

**Cellular Location** Cell membrane; Single-pass type I membrane protein

**Tissue Location** Expressed on the surface of activated T-cells.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.