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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 μg/ml (100 μl/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 μm 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_2O or PBS up to 100 μg/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 rich 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 $CD4^+$, $CD8^+$, memory $CD8^+$, 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'.