

Rev04 DATASHEET

Update: Mar,01,2022

4-1BB (CD137) Fc Chimera, Human

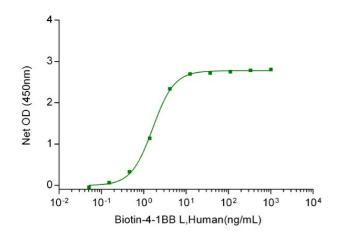
Cat. No.: Z03382

Product Introduction

Species	Human
Protein Construction	4-1BB (Leu24-Gln186) Accession # Q07011 hFc
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
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 μ g/ml (100 μ l/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	СНО
Apparent Molecular Weight	55~60 kDa, on SDS-PAGE under reducing conditions.
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 ₂ O or PBS up to 100 μ 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.

Examples





Measured by its binding ability in a ligand-receptor binding ELISA. When recombinant human 4-1BB Fc Chimera is Immobilized at 1 μ g/mL (100 μ L/well), the concentration of recombinant human 4-1BB Ligand that produces 50% optimal binding response is found to be approximately 5-15 ng/mL.

Background

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.

Synonyms: 4-1BB; TNFRSF9; CD137 antigen; T-cell antigen ILA

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.