

Recombinant Human 4-1BB Receptor

Catalog # FL027

Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 97% by SDS-PAGE or HPLC.
Endotoxin	< 0.1 EU/μg of rHu4-1BB Receptor protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Human
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The biological activity is determined by its inhibitory effect of IL-8 production using human peripheral blood mononuclear cells. About 90 % of inhibition was seen using a concentration of 1 μg for both 4-1BB Ligand and 4-1BB Receptor.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, with 150 mM NaCl, pH 5.8.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.
Accession #	Q07011 Glu19-Ser184
Amino acid sequence	ERTRSLQDPCSNCPAGTFCDNRRNQICSPCPPNSFSSAGGQRTCDICRQCKGVFRTRKECSSTSNAECDCTPGFHCLGAGC SMCEQDCKQGQELTKKGGCKDCFCGTNDQKRGICRPWTNCSLDGKSVLVNGTKERDVVCGPSPADLSPGASSVTPPAR EPGHS
Molecular weight	Approximately 17.7 kDa, a single non-glycosylated polypeptide chain containing 166 amino acids.
Synonyms	TNFRSF9, CD137, T-cell antigen ILA, CDw137
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored ≤ -20°C. Please avoid repeated freeze-thaw cycles after reconstitution. 36 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.
Precautions	Recombinant Human 4-1BB Receptor is for research use only and not for use in diagnostic or therapeutic procedures.

Background

4-1BB receptor, also named TNFRSF9 is a member of the TNF superfamily of receptors. It is mainly expressed on the surface of a variety of T cells, but also found in B cells, monocytes, and various transformed cell lines. 4-1BB receptor binds to 4-1BBL, and they co-stimulate activity for activated T cells. Signaling by 4-1BB Receptor has been implicated in the antigen-presentation process and generation of cytotoxic T cells. Crosslinking of 4-1BB Receptor enhances T cell proliferation, IL-2 secretion survival and cytolytic activity. Further, it can enhance immune activity to eliminate tumors in mice. The human 4-1BB Receptor gene codes for a 255 amino acid type I transmembrane protein containing a 17 amino acid N-terminal signal sequence, a 169 amino acid extracellular domain, a 27 amino acid transmembrane domain and a 42 amino acid cytoplasmic domain. Recombinant Human soluble 4-1BB Receptor is a 166 amino acid polypeptide, which contains the cysteine-rich TNFR-like extracellular domain of 4-1BB Receptor.

