Recombinant Human 4-1BB Receptor/TNFRSF9

#R00094

Size: 5 μg/100 μg/500 μg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 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.

Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

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.

AA Sequence

ERTRSLQDPCSNCPAGTFCDNNRNQICSPCPPNSFS
SAGGQRTCDICRQCKGVFRTRKECSSTSNAECDCTP
GFHCLGAGCSMCEQDCKQGQELTKKGCKDCCFGTF
NDQKRGICRPWTNCSLDGKSVLVNGTKERDVVCGP
SPADLSPGASSVTPPAPAREPGHS

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 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.

Product Specification

Synonyms	TNFRSF9, CD137 Antigen, T-cell Antigen ILA
Accession	Q07011
GeneID	3604
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 17.7 kDa, a single non-glycosylated polypeptide chain containing 166 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological 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 inibition was seen using a concentration of 1 μg for both 4-1BB Ligand and 4-1BB Receptor.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 10 mM PB, pH 8.0, 150 mM NaCl.
Endotoxin	Less than 1 EU/μg of rHu4-1BB Receptor as determined by LAL method.