

Recombinant Human 4-1BB Ligand/TNFSF9

#R00093

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

4-1BBL is a member of the tumor necrosis factor (TNF) receptor family. This receptor contributes to the clonal expansion, survival, and development of T cells. In addition, 4-1BBL expression is found on dendritic cells, follicular dendritic cells, natural killer cells, granulocytes and cells of blood vessel walls at sites of inflammation. CD137 has been shown to interact with TRAF2. The human 4-1BBL gene codes for a 254 amino acid type II transmembrane containing a 28 amino acid cytoplasmic domain, a 21 amino acid transmembrane domain, and a 205 amino acid extracellular domain (ECD). The human 4-1BBL ECD shares 32 % and 35 % a.a. identity with murine and rat ECD.

AA Sequence

REGPELSPDDPAGLLDLRQGMFAQLVAQNVLLIDGPL
SWYSDPGLAGVSLTGGLSYKEDTKELVVAKAGVYYV
FFQLELRRVVGEGSGSVSLALHLQPLRSAAGAAALA

LTVDLPPASSEARNSAFGFQGRLLHLSAGQRLGVHL
HTEARARHAWQLTQGATVLGLFRVTPEIPAGLPSPRS
E

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	TNFSF9, CD137L
Accession	P41273
GeneID	8744
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 19.4 kDa, a single non-glycosylated polypeptide chain containing 184 amino acids.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by stimulation of IL-8 production using human PBMC is less than 10 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁵ IU/mg.

Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
Endotoxin	Less than 1 EU/µg of rHu4-1BBL as determined by LAL method.
