Datasheet

Cat. No. P1273

Recombinant Human 4-1BB Receptor/TNFRSF9

Information

Gene ID	3604
Accession #	Q07011
Alternate Names	TNFRSF9, CD137 Antigen, T-cell Antigen ILA
Source	Escherichia coli.
M.Wt	Approximately 17.7 kDa, a single non-glycosylated polypeptide chain containing 166 amino acids.
AA Sequence	ERTRSLQDPC SNCPAGTFCD NNRNQICSPC PPNSFSSAGG QRTCDICRQC KGVFRTRKEC SSTSNAECDC TPGFHCLGAG CSMCEQDCKQ GQELTKKGCK DCCFGTFNDQ KRGICRPWTN CSLDGKSVLV NGTKERDVVC GPSPADLSPG ASSVTPPAPA REPGHS
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
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
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 10 mM PB, pH 8.0, 150 mM NaCl.
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.
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.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	5μg	100μg	500μg
Recombinant Human 4-1BB Receptor/TNFRSF9	5μg	100μg	500μg

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

Quality Control

Purity	> 97 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/μg of rHu4-1BB Receptor as determined by LAL method.

Description

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.

Reference

1. Arch RHandThompson CB. 1998. Mol Cell Biol, 18: 558-65
2. Barao I. 2012. Front Immunol, 3: 402
3. Taraban VY, Rowley TF, O'Brien L, et al. 2002. Eur J Immunol, 32: 3617-27
4. Marin V, Kakuda H, Dander E, et al. 2007. Exp Hematol, 35: 1388-97.

APExBIO Technology
www.apexbt.com
7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com