Bioactive

TNFSF9 (Human) Recombinant Protein

Catalog # P9219 Size 20 ug

Specification

Product Description	Human TNFSF9 recombinant protein expressed in *Escherichia coli*.
Sequence	REGPELSPDDPAGLLDLRQGMFAQLVAQNVLLIDGPLSWYSDPGLAGVSLTGGLSYKEDTKELV VAKAGVYYVFFQLELRRVVAGEGSGSVSLALHLQPLRSAAGAAALALTVDLPPASSEARNSAFG FQGRLLHLSAGQRLGVHLHTEARARHAWQLTQGATVLGLFRVTPEIPAGLPSPRSE
Host	Escherichia coli
Theoretical MW (kDa)	19.5
Form	Lyophilized
Preparation Method	*Escherichia coli* expression system
Purification	chromatographic
Purity	> 97% as determined by (a) RP-HPLC.(b) SDS-PAGE.
Activity	ED_{50} is 5-10 ng/mL, measured by the dose-dependent stimulation of IL-8 production by human PBM C a chemotaxis bioassay using human MCF-7 cells, corresponding to a specific activity of 1.0 x 10^5-2.0 x 10^5 IU/mg.
Storage Buffer	Lyophilized from a solution containing 1X PBS, pH 7.4. Reconstitute the lyophilized powder in ddH_2O to 100 ug/mL.
Storage Instruction	Lyophilized protein at room temperature for 3 weeks, should be stored at -20°C. Protein aliquots at 4 °C for 2-7 days and should be stored at -20°C to -80°C for long term storage. Avoid repeated freeze/thaw cycles.

Applications

- Functional Study

Gene Info — TNFSF9

Entrez GeneID	8744
Protein Accession#	P41273
Gene Name	TNFSF9
Gene Alias	4-1BB-L, CD137L
Gene Description	tumor necrosis factor (ligand) superfamily, member 9
Omim ID	606182
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a cytokine that belongs to the tumor necrosis factor (TNF) lig and family. This transmembrane cytokine is a bidirectional signal transducer that acts as a ligand for TNFRSF9/4-1BB, which is a costimulatory receptor molecule in T lymphocytes. This cytokine a nd its receptor are involved in the antigen presentation process and in the generation of cytotoxic T cells. The receptor TNFRSF9/4-1BB is absent from resting T lymphocytes but rapidly expresse d upon antigenic stimulation. The ligand encoded by this gene, TNFSF9/4-1BBL, has been shown to reactivate anergic T lymphocytes in addition to promoting T lymphocyte proliferation. This cytok ine has also been shown to be required for the optimal CD8 responses in CD8 T cells. This cytoki ne is expressed in carcinoma cell lines, and is thought to be involved in T cell-tumor cell interactio n
Other Designations	homolog of mouse 4-1BB-L|receptor 4-1BB ligand

Pathway

- Cytokine-cytokine receptor interaction

Disease

- Birth Weight
- Genetic Predisposition to Disease
- Glioblastoma
- Glioma
- Hematologic Diseases

- Hodgkin Disease
- Leukemia
- Lymphoproliferative Disorders
- Meningeal Neoplasms
- Meningioma
- Multiple Myeloma
- Occupational Diseases
- Ovarian Neoplasms
- Waldenstrom Macroglobulinemia
- Werner syndrome