

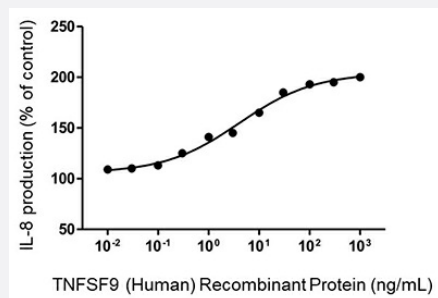
Bioactive

TNFSF9 (Human) Recombinant Protein

Catalog # P7010

Size 100 ug

Applications



Functional Study

The ED₅₀ for this effect is 1-5 ng/mL, measured by the induction of IL-8 secretion in human PBMCs.



Specification

Product Description

Human TNFSF9 recombinant protein with polyhistidine tag at the C-terminus expressed in *Escherichia coli*.

Sequence

MREGPELSPDDPAGLLDLRQGMFAQLVAQNVLLIDGPLSWYSDPGLAGVSLTGGLSYKEDTKEL
VVAKAGVYYVFFQLELRRVVAGEGSGSVSLALHLQPLRSAAGAAALALTVDLPPASSEARNSAF
GFQGRLLHLSAGQRLGVHLHTEARARHAWQLTQGATVLGLFRVTPEIPAGLPSPRSE

Host

Escherichia coli

Form

Lyophilized

Preparation Method

Escherichia coli expression system

Purification	Ni-NTA chromatography
Purity	> 95% by SDS-PAGE
Endotoxin Level	< 0.1 EU per 1 ug of the protein by the LAL method.
Activity	Measured by the induction of IL-8 secretion in human PBMCs. The ED 50 for this effect is 1-5 ng/mL.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue
Recommend Usage	SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from PBS, pH 7.4.
Storage Instruction	Store at -20°C, lyophilized protein is stable for 1 year. After reconstitution with deionized water, store at -20 to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study

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- SDS-PAGE

Gene Info — TNFSF9

Entrez GeneID	8744
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) ligand 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 and 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 expressed 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 cytokine has also been shown to be required for the optimal CD8 responses in CD8 T cells. This cytokine is expressed in carcinoma cell lines, and is thought to be involved in T cell-tumor cell interaction.

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](#)