

Bioactive

TNFSF9 (Human) Recombinant Protein

Catalog # P9946 Size 100 ug, 20 ug

Specification	
Regulatory Status	RUO grade
Product Description	Human TNFSF9 recombinant protein with His tag at the C-terminus expressed in Escherichia coli.
Host	Escherichia coli
Theoretical MW (kDa)	Calculated MW: 20.4
Form	Lyophilized
Preparation Method	Escherichia coli expression system
Purity	> 95% by SDS-PAGE
Endotoxin Level	< 0.1 EU/ug
Activity	The ED $_{50}$ for this effect is 1-5 ng/mL, measured by its ability to induce IL-8 secretion in human PBM Cs.
Recommend Usage	SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from PBS, pH 7.4. Reconstitute the lyophilized protein in sterile H ₂ O to a concentration of at least 200 ug/mL and incuba te the stock solution for at least 20 min to ensure sufficient redissolution. Please use the protein within one month after reconstitution.
Storage Instruction	Store at -20°C for 12 months in lyophilized state. After reconstitution with deionized water, store at -20 or -80°C for 1 month. Aliquot to avoid repeated freezing and thawing.

Applications

Functional Study



SDS-PAGE

Gene Info — TNFSF9	
Entrez GenelD	8744
Gene Name	TNFSF9
Gene Alias	4-1BB-L, CD137L
Gene Description	tumor necrosis factor (ligand) superfamily, member 9
Omim ID	606182
Gene Ontology	<u>Hyperlink</u>
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 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