

# Recombinant human 4-1BB Ligand/TNFSF9 protein

Catalog Number: ATGP0308

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

71-254aa

### UniProt No.

P41273

### NCBI Accession No.

NP\_003802

### Alternative Names

Tumor necrosis factor ligand superfamily member 9, 4-1BB ligand, 4-1BBL, receptor 4-1BB ligand, homolog of mouse 4-1BB-L, CD137 ligand, CD137L

## PRODUCT SPECIFICATION

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### Molecular Weight

23.8 kDa (222aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 100mM NaCl, 20% glycerol

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Measured by its binding ability in a functional ELISA with Human TNFRSF9 (CAT# ATGP3303).

### Tag

His-Tag

### Application

SDS-PAGE, Bioactivity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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# Recombinant human 4-1BB Ligand/TNFSF9 protein

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## Description

4-1BB ligand is a type 2 transmembrane glycoprotein belonging to the TNF superfamily. 4-1BBL is expressed by activated B cells, macrophages, dendritic cells, activated T cells, neurons and astrocytes. The interaction of 4-1BB with 4-1BBL strongly regulates immunity and has been proposed to preferentially control T cell responses based on studies in various murine models of cancer, infectious disease and autoimmune disease. Recombinant human 4-1BB ligand, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

## Amino acid Sequence

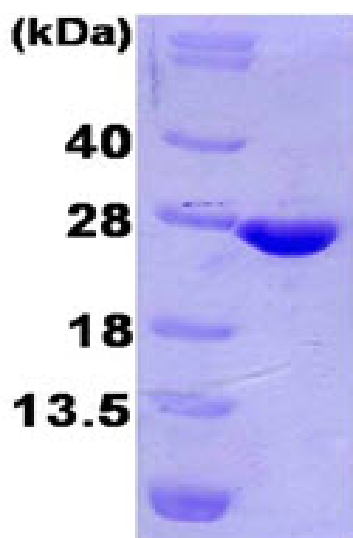
MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSHMRE GPELSPDDPA GLLDLRQGMF AQLVAQNVLL  
IDGPLSWYSD PGLAGVSLTG GLSYKEDTKE LVVAKAGVYY VFFQLELRRV VAGEGSGSVS LALHLQPLRS AAGAAALALT  
VDLPPASSEA RNSAFGFQGR LLHLSAGQRL GVHLHTEARA RHAWQLTQGA TVLGLFRVTP EIPAGLPSPR SE

## General References

Lee SW., et al. (2008). Nat Immunol. 9(8):917-26  
Sharma RK., et al. (2009). Cancer Res. 69(10):4319-26

## DATA

### SDS-PAGE



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

## Biological Activity

# Recombinant human 4-1BB Ligand/TNFSF9 protein

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Human TNFSF9 is coated at 2 ug/ml (100 ul/well) can bind Human TNFRSF9 (CAT# ATGP3303) in a Functional ELISA assay.

