

## Product datasheet for **AR09189PU-L**

### 4-1BBL / TNFSF9 (71-254, His-tag) Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	4-1BBL / TNFSF9 (71-254, His-tag) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MRGSHHHHHH</u> GMASMTGGQQ MGRDLYDDDD KDRWGSHMRE GPELSPDDPA GLLDLRQGMF AQLVAQNVLL IDGPLSWYSD PGLAGVSLTG GLSYKEDTKE LVVAKAGVYY VFFQLELRRV VAGEGSGSVS LALHLQPLRS AAGAAALALT VDLPPASSEA RNSAFGFQGR LLHLSAGQRL GVHLHTEARA RHAWQLTQGA TVLGLFRVTP EIPAGLPSPR SE
Tag:	His-tag
Predicted MW:	23.8 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified IgG Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 100 mM NaCl, 20% glycerol
Preparation:	Liquid purified IgG
Protein Description:	Recombinant human 4-1BB ligand, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_003802</u>
Locus ID:	8744
UniProt ID:	<u>P41273</u> , <u>A0A0U5J8I0</u>
Cytogenetics:	19p13.3
Synonyms:	4-1BB-L; CD137L; TNLG5A



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**Summary:**

The protein encoded by this gene is a cytokine that belongs to the tumor necrosis factor (TNF) ligand 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.[provided by RefSeq, Oct 2008]

**Protein Families:**

Druggable Genome, Transmembrane

**Protein Pathways:**

Cytokine-cytokine receptor interaction

**Product images:**