

**AR09189PU-N****Recombinant human 4-1 BBL /CD137 / TNFRSF9 (aa 71-254), His-tagged**

<b>Alternate names:</b>	4-1BB ligand, CD137L, Tumor necrosis factor ligand superfamily member 9
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1 mg/ml (determined by Bradford assay)
<b>Background:</b>	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.
<b>Uniprot ID:</b>	<a href="#">P41273</a>
<b>NCBI:</b>	<a href="#">NP_003802</a>
<b>GeneID:</b>	<a href="#">8744</a>
<b>Species:</b>	Human
<b>Source:</b>	E. coli
<b>Format:</b>	<b>State:</b> Liquid purified IgG <b>Purity:</b> >95% by SDS - PAGE <b>Buffer System:</b> 20 mM Tris-HCl buffer (pH 8.0) containing 100 mM NaCl, 20% glycerol
<b>Description:</b>	Recombinant human 4-1BB ligand, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography. <b>AA Sequence:</b> <u>MRGSHHHHHH</u> GMASMTGGOO MGRDLYDDDD KDRWGSHMRE GPELSPDDPA GLLDLRQGMF AQLVAQNVLL IDGPLSWYSD PLAGVSLTG GLSYKEDTKE LVVAKAGVYY VFFQLELRRV VAGEGSGSVS LALHLQPLRS AAGAAALALT VDLPPASSEA RNSAFGFQGR LLHLSAGQRL GVHLHTEARA RHAWQLTQGA TVLGLFRVTP EIPAGLPSR SE <b>Molecular weight:</b> 23.8 kDa (222aa)
<b>Storage:</b>	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. Shelf life: one year from despatch.
<b>General Readings:</b>	Lee SW., et al. (2008). Nat Immunol. 9(8):917-26. Sharma RK., et al. (2009). Cancer Res. 69(10):4319-26.

**Pictures:**

4-1BB ligand , 71-254 aa human, His-tagged, recombinant: 15% SDS-PAGE (3  $\mu$ g)

