

Recombinant Human 4-1BB Ligand
Catalog # PBG10001**Specification**

Recombinant Human 4-1BB Ligand - Product Information**Recombinant Human 4-1BB Ligand - Additional Information****Description**

4-1BBL, a member of the TNF superfamily, is expressed in B cells, dendritic cells, activated T cells and macrophages. 4-1BBL binds to its receptor 4-1BB, and provides a co-stimulatory signal for T cell activation and expansion. The human 4-1BBL gene codes for a 254 amino acid type II transmembrane containing a 28 amino acid cytoplasmic domain, a 21 amino acid transmembrane domain, and a 205 amino acid extracellular domain. The soluble form of 4-1BBL contains the TNF-like portion of the extracellular domain of 4-1BBL. Recombinant human 4-1BBL is a soluble 19.5 kDa protein consisting of 185 amino acid residues.

Biological Activity

Determined by the dose-dependent stimulation of IL-8 production by human PBMC. The **ED₅₀** for this effect is 5-10 ng/ml. Please Note: Results may vary with PBMC donors.

Authenticity

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin

Endotoxin level is <0.1 ng/ µg of protein (<1EU/ µg).

Protein Content

Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage

-20°C

Precautions

Recombinant Human 4-1BB Ligand is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human 4-1BB Ligand - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

Recombinant Human 4-1BB Ligand - Images