

Recombinant Human 4-1BB Ligand








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

Rev. 2.00

Catalog Number:	PHC1564
Quantity:	20 µg
Lot Number:	See product label.
Molecular Weight:	19.5 kDa, 185 amino acid residues.
Purity:	≥98% by SDS-PAGE and HPLC analyses.
Biological Activity:	ED ₅₀ ≤10 ng/mL, determined by the dose dependent stimulation of IL-8 production by human PBMCs. Please note that this biological activity may vary with each PBMC donor. 4-1BBL, a protein which bears structural homology with tumor necrosis factor, has been observed to induce cell activation and growth in short time course studies. Cells which express 4-1BBL include B cells, dendritic cells, and macrophages.
Formulation:	Lyophilized from 5 mM Tris, pH 8, with 75 mM sodium chloride. Filtered through a 0.2 micron filter prior to lyophilization.
Endotoxin:	<0.1 ng/µg of 4-1BBL
Production:	Produced in <i>E. coli</i> and purified by sequential chromatography.
Reconstitution Recommendation:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile, distilled water to a concentration of 0.1–1.0 mg/mL. <i>Do not vortex</i> . This solution can be stored at 2°C to 8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein, such as 0.1% BSA and store in working aliquots at –80°C to –20°C.
Suggested Working Dilutions:	The optimal concentration should be determined for each specific application.
Storage:	The lyophilized protein is stable at room temperature for 1 month, but should be kept at –20°C for long term storage. Working aliquots stored with a carrier protein are stable for at least 3 months at –80°C to –20°C. Avoid repeated freeze/thaw cycles.
Expiration Date:	See product label.

Explanation of Symbols

The symbols present on the product label are explained below:

Symbol	Description
	Catalog Number
	Research Use Only
	Use by
	Manufacturer
	Without, does not contain
	Protect from light
	Directs the user to consult instructions for use (IFU), accompanying the product.

Symbol	Description
	Batch code
	In vitro diagnostic medical device
	Temperature limitation
	European Community authorized representative
	With, contains
	Consult accompanying documents

Limited Use Label License: Research Use Only

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For Research Use Only. Caution: Not for human or animal therapeutic or diagnostic use.

Manufacturing site: 7335 Executive Way | Frederick, MD 21704 | Toll Free in USA 800.955.6288

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