PRODUCT INFORMATION Croyez GMP[®] 4-1BBL (4-1BB ligand), Human

Catalog number	C01084-GMP-100 / C01084-GMP-1000
Package	100 µg / 1 mg
Description	4-1BBL is a transmembrane cytokine that is part of the tumor necrosis factor (TNF) ligand family. Recombinant human 4-1BBL is intended for use in cell culture applications. 4-1BBL and its interaction with 4-1BB is involved in the antigen presenting process, proliferation of CD4 and CD8 positive T-cells, as well as cytokine secretion from T-cells.
Source	<i>Escherichia coli</i> Animal-free reagent and laboratory Manufactured and tested under GMP guideline
Sequence	MREGPELSPDDPAGLLDLRQGMFAQLVAQNVLLIDGPLSWYSDPGLAGVSLTG GLSYKEDTKELVVAKAGVYYVFFQLELRRVVAGEGSGSVSLALHLQPLRSAAGA AALALTVDLPPASSEARNSAFGFQGRLLHLSAGQRLGVHLHTEARARHAWQLT QGATVLGLFRVTPEIPAGLPSPRSE with polyhistidine tag at the C-terminus
Endotoxin level	<0.1 EU per 1 µg of the protein by the LAL method.
Activity	Measure by its ability to induce IL-8 secretion in human PBMCs. The ED $_{50}$ for this effect is 1-5 ng/mL.
Purity	>95% as determined by SDS-PAGE analysis. Purified by Ni-NTA chromatography.
Formulation	The protein was lyophilized from a solution containing 1X PBS, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile H_2O to a concentration not less than 100 µg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.
Storage	Lyophilized protein should be stored at -20°C. This product is stable for one year upon receipt, when handled and stored as instructed. Upon reconstitution, protein aliquots should be stored at -20°C or -80°C. Avoid repeated freeze/thaw cycles.
Note	Please use within one month after protein reconstitution.
Specification	 Croyez GMP[®] recombinant proteins are manufactured in ISO 13485:2016 and GMP-certified facility. The processes include: Testing and traceability of raw material Records of the maintenance and equipment calibration



Reference	 Personnel training records Batch-to-batch consistency Documentation of QA control and process changes Manufactured and tested under an ISO 13485:2016 certified quality management system Stability monitor of product shelf-life 1. Wen, Tao et al. (2002). J Immunol. 168,10: 4897-906.
Reference	 Documentation of QA control and process changes Manufactured and tested under an ISO 13485:2016 certified quality management system Stability monitor of product shelf-life
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Reference	 management system Stability monitor of product shelf-life
Reference	Stability monitor of product shelf-life
Reference	
Reference	1. Wen, Tao et al. (2002). J Immunol. 168,10: 4897-906.
Reference	
	2. Vinay DS, Kwon BS. (1998) Semin Immunol. 10,6:481-9.
	kDa 75- 63- 48- 35- 25-
	17-

SDS-PAGE analysis of Croyez GMP[®] 4-1BBL, Human

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

