

PRODUCT INFORMATION

## Croyez GMP® 4-1BBL (4-1BB ligand), Human

v. 240701

Catalog number	C01084-GMP-1000				
Package	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.				
Expression System	Escherichia coli				
Species of Origin	Human				
Affinity Tag	His Tag (C-term)				
Sequence	Arg71-Glu254				
Endotoxin level	<0.05 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.				
Mycoplasma	Not detected				
Form	Lyophilized				
Storage Buffer	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.				
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile $H_2O$ to a concentration not less than 0.5 mg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.				
Stability & Storage	This product is stable after storage at:  -20°C for 12 months in lyophilized state from date of receipt.  -20°C or -80°C for 1 month under sterile conditions after reconstitution.  Avoid repeated freeze/thaw cycles.				
Specification	Croyez GMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP-certified facility. The processes include:  • Animal-free reagent and laboratory				

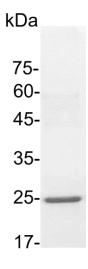


•	Manufactured	and	tested	under	<b>GMP</b>	guideline
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- Testing and traceability of raw material
- Records of the maintenance and equipment calibration
- · Personnel training records
- · Batch-to-batch consistency
- Documentation of QA control and process changes
- Manufactured and tested under an ISO 13485:2016 certified quality management system
- · Stability monitor of product shelf-life

## Reference

- 1. Wen, Tao et al. (2002) J Immunol. 168,10: 4897-906.
- 2. Vinay DS, Kwon BS. (1998) Semin Immunol. 10,6:481-9.
- 3. Martinez-Perez A. G et al. (2021) Int. J. Mol. Sci., 22(12), 6210



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

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