

PRODUCT INFORMATION

Croyez GMP® IL-1 beta (Interleukin-1 beta), Human

Catalog number	C01002-GMP-100 / C01002-GMP-1000
Package	100 µg / 1 mg
Description	Interleukin-1 beta (IL-1β) also known as leukocytic pyrogen, leukocytic endogenous mediator, mononuclear cell factor, lymphocyte activating factor and other names, is a cytokine protein that in humans is encoded by the IL1B gene. There are two genes for interleukin-1 (IL-1): IL-1 alpha and IL-1 beta (this gene). IL-1β precursor is cleaved by cytosolic caspase 1 (interleukin-1 beta convertase) to form mature IL-1β.
Source	<i>Escherichia coli</i> Animal-free reagent and laboratory Manufactured and tested under GMP guideline
Sequence	MASAPVRSLNCTLRDSQQKSLVMSGPYELKALHLQGQDMEQQVVFMSFVQG EESNDKIPVALGLKEKNLYLSCVLKDDKPTLQLESVDPKNYPKKKMEKRFVFNKI EINNKLFEFESAQFPNWIYSTSQAENMPVFLGGTKGGQDITDFTMQFVSS 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 proliferation in D10.G4.1 cells. The ED ₅₀ for this effect is <10 pg/mL. The specific activity of recombinant human IL-1 beta is approximately >1.5 x 10 ⁸ IU/mg. Measure by its ability to induce IL-8 secretion in HT29 cells. The ED ₅₀ for this effect is 1.8-5.1 ng/mL.
Purity	>98% as determined by SDS-PAGE. Purified by Ni-NTA chromatography.
Formulation	The protein was lyophilized from a solution containing 1X PBS, pH 8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile H ₂ O 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.

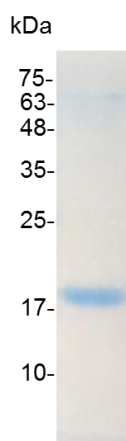
Specification

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
- 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. Yazdi AS, Ghoreschi K. (2016) *Adv Exp Med Biol.* 941: 21-29.
2. Gabay C. et al. (2010) *Nat Rev Rheumatol.* 6,4: 232-41.
3. Lopez-Castejon G, Brough D. (2011) *Cytokine Growth Factor Rev.* 22,4: 189-95
4. Weber A. et al. (2010) *Sci Signal.* 3,105: cm2.



SDS-PAGE analysis of Croyez GMP® IL-1 beta, Human

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