

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.
Expression System	<i>Escherichia coli</i>
Species of Origin	Human
Affinity Tag	His Tag (C-term)
Sequence	Ala117-Ser269
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 HT29 cells. The ED ₅₀ for this effect is <2.0 ng/mL. The specific activity of recombinant human IL-1 beta is approximately >3 x 10 ⁷ IU/mg, which is calibrated against the human IL-1 beta WHO International Standard (NIBSC code: 86/680).
Purity	>98% as determined by SDS-PAGE.
Mycoplasma	Not detected
Form	Lyophilized
Storage Buffer	Lyophilized from a 0.2 µm filtered solution of PBS, pH 8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile H ₂ O 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	<p>This product is stable after storage at:</p> <ul style="list-style-type: none"> -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. <p>Avoid repeated freeze/thaw cycles.</p>

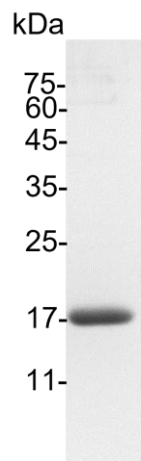
Croyez GMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP-certified facility. The processes include:

Specification

- Animal-free reagent and laboratory
- Manufactured and tested under GMP guideline
- 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 GMP® IL-1 beta, Human

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