

<b>Catalog number</b>	C01002-GMP-100 / C01002-GMP-1000
<b>Package</b>	100 µg / 1 mg
<b>Description</b>	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.
<b>Expression System</b>	<i>Escherichia coli</i>
<b>Species of Origin</b>	Human
<b>Affinity Tag</b>	His Tag (C-term)
<b>Sequence</b>	Ala117-Ser269
<b>Endotoxin level</b>	<0.05 EU per 1 µg of the protein by the LAL method.
<b>Activity</b>	Measure by its ability to induce IL-8 secretion in HT29 cells. The ED <sub>50</sub> for this effect is <2.0 ng/mL. The specific activity of recombinant human IL-1 beta is approximately >3 x 10 <sup>7</sup> IU/mg, which is calibrated against the human IL-1 beta WHO International Standard (NIBSC code: 86/680).
<b>Purity</b>	>98% as determined by SDS-PAGE.
<b>Mycoplasma</b>	Not detected
<b>Form</b>	Lyophilized
<b>Storage Buffer</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 8.0.
<b>Reconstitution</b>	It is recommended to reconstitute the lyophilized protein in sterile H <sub>2</sub> 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.
<b>Stability &amp; Storage</b>	<p>This product is stable after storage at:</p> <ul style="list-style-type: none"> <li>-20°C for 12 months in lyophilized state from date of receipt.</li> <li>-20°C or -80°C for 1 month under sterile conditions after reconstitution.</li> </ul> <p>Avoid repeated freeze/thaw cycles.</p>

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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

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**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

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