

## PRODUCT INFORMATION

**Croyez GMP® IL-3 (Interleukin-3), Human**

<b>Catalog number</b>	C01005-GMP-100 / C01005-GMP-1000
<b>Package</b>	100 µg / 1 mg
<b>Description</b>	Interleukin-3 (IL-3) is an interleukin, a type of biological signal (cytokine) that can improve the body's natural response to disease as part of the immune system. It acts by binding to the IL-3 receptor. IL-3 stimulates the differentiation of multipotent hematopoietic stem cells into myeloid progenitor cells or, with the addition of IL-7, into lymphoid progenitor cells. In addition, IL-3 stimulates proliferation of all cells in the myeloid lineage (granulocytes, monocytes, and dendritic cells), in conjunction with other cytokines, e.g., Erythropoietin (EPO), Granulocyte macrophage colony-stimulating factor (GM-CSF), and IL-6. It is secreted by basophils and activated T cells to support growth and differentiation of T cells from the bone marrow in an immune response.
<b>Source</b>	<i>Escherichia coli</i> Animal-free reagent and laboratory Manufactured and tested under GMP guideline
<b>Sequence</b>	MAPMTQTTS�KTSWVNCNSMIDEIITHLKQPPLPLLDNFNNLNGEDQDILMENNLR RPNLEAFNRAVKSLQNASAIESILKNLLPCLPLATAAPTRHPIHIKGDWNEFRRK LTFYLKLENAQAQQTTLAIF with polyhistidine tag at the C-terminus
<b>Endotoxin level</b>	<0.1 EU per 1 µg of the protein by the LAL method.
<b>Activity</b>	Measure by its ability to induce TF-1 cells proliferation. The ED <sub>50</sub> for this effect is <0.15 ng/mL. The specific activity of recombinant human IL-3 is approximately >1.2 x 10 <sup>6</sup> IU/mg.
<b>Purity</b>	>98% as determined by SDS-PAGE. Purified by Ni-NTA chromatography.
<b>Formulation</b>	The protein was lyophilized from a solution containing 1X 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 100 µg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.
<b>Storage</b>	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. Wagemaker G et al. (1990) *Biotherapy*. 2,4: 337-45.
2. Guthridge MA. et al. (1998) *Stem Cells*. 16,5: 301-13.
3. Ihle JN. (1992) *Chem Immunol*. 51: 65-106.
4. Dougan M. et al. (2019) *Immunity*. 50,4: 796-811.



SDS-PAGE analysis of Croyez GMP® IL-3, Human

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