

Catalog number	C01004A-GMP-100 / C01004A-GMP-1000
Package	100 µg / 1 mg
Description	Interleukin-2 (IL-2) is an interleukin, a type of cytokine signaling molecule in the immune system. It is a 15.5-16 kDa protein that regulates the activities of white blood cells (leukocytes, often lymphocytes) that are responsible for immunity. IL-2 is part of the body's natural response to microbial infection, and in discriminating between foreign ("non-self") and "self". IL-2 mediates its effects by binding to IL-2 receptors, which are expressed by lymphocytes.
Expression System	<i>Escherichia coli</i>
Species of Origin	Human
Affinity Tag	His Tag (C-term)
Sequence	MAPTSSSTKKTQLQLEHLLLDLQMLNGINNYKNPKLTRMLTFKFYMPKKATELK HLQCLEEELKPLEEVLNLAQSKNFHLRPRDLISNINVIVLELKGSETTFMCEYAD ETATIVEFLNRWITFCQSIISTLT with polyhistidine tag at the C-terminus
Endotoxin level	<0.01 EU per 1 µg of the protein by the LAL method.
Activity	Measure by its ability to induce proliferation in CTLL-2 cells. The ED ₅₀ for this effect is <0.5 ng/mL. The specific activity of recombinant human IL-2 is approximately $\geq 1.8 \times 10^7$ IU/mg, which is calibrated against the human IL-2 WHO International Standard (NIBSC code: 86/500).
Purity	>95% as determined by SDS-PAGE analysis.
Mycoplasma	Not detected
Form	Lyophilized
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	This product is stable after storage at: <ul style="list-style-type: none"> -20°C for 12 months in lyophilized state from date of receipt. -20°C or -80°C for 6 months under sterile conditions after reconstitution. Avoid repeated freeze/thaw cycles.

Storage Buffer Lyophilized from a 0.2 µm filtered solution of NaPi buffer, 0.018% SDS, pH 7.5.

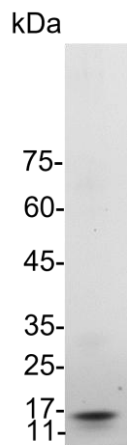
Specification Croyez GMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP-certified facility. The processes include:

Testing and traceability of raw material

- 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. Malek TR. (2008) *Annu Rev Immunol.* 26: 453-79.
2. Gaffen SL, Liu KD. (2004) *Cytokine.* 28,3: 109-23.
3. Varas A et al. (1998) *Dev Immunol.* 6,1-2: 141-7.
4. Abbas AK et al. (2018) *Sci Immunol.* 3,25: eaat1482.



SDS-PAGE analysis of Croyez GMP® Human IL-2 Protein

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