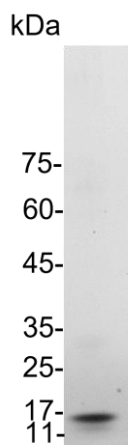


<b>Catalog number</b>	C01004A-GMP-100 / C01004A-GMP-1000
<b>Package</b>	100 µg / 1 mg
<b>Description</b>	Interleukin-2 (IL-2) is an interleukin, a type of cytokine signaling molecule in the immune system. It is a 15.5-16 kDa protein that regulates the activities of white blood cells (leukocytes, often 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.
<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>	MAPTSSSTKKTQLQLEHLLLDLQMLNGINNYKNPKLTRMLTFKFYMPKKATELK HLQCLEEELKPLEEVLNLAQSKNFHLRPRDLISNINVIVLELKGSETTFMCEYAD ETATIVEFLNRWITFCQSIISTLT with polyhistidine tag at the C-terminus
<b>Endotoxin level</b>	<0.01 EU per 1 µg of the protein by the LAL method.
<b>Activity</b>	Measure by its ability to induce proliferation in CTLL-2 cells. The ED <sub>50</sub> 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).
<b>Purity</b>	>95% as determined by SDS-PAGE analysis.
<b>Mycoplasma</b>	Not detected
<b>Form</b>	Lyophilized
<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>	This product is stable after storage at: <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 6 months under sterile conditions after reconstitution.</li> </ul> Avoid repeated freeze/thaw cycles.

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<b>Storage Buffer</b>	Lyophilized from a 0.2 $\mu$ m filtered solution of NaPi buffer, 0.018% SDS, pH 7.5.
<b>Specification</b>	<p>Croyez GMP<sup>®</sup> recombinant proteins are manufactured in ISO 13485:2016 and GMP-certified facility. The processes include:</p> <p>Testing and traceability of raw material</p> <ul style="list-style-type: none"><li>• Animal-free reagent and laboratory</li><li>• Manufactured and tested under GMP guideline</li><li>• Testing and traceability of raw material</li><li>• Records of the maintenance and equipment calibration</li><li>• Personnel training records</li><li>• Batch-to-batch consistency</li><li>• Documentation of QA control and process changes</li><li>• Manufactured and tested under an ISO 13485:2016 certified quality management system</li><li>• Stability monitor of product shelf-life</li></ul>
<b>Reference</b>	<ol style="list-style-type: none"><li>1. Malek TR. (2008) <i>Annu Rev Immunol.</i> 26: 453-79.</li><li>2. Gaffen SL, Liu KD. (2004) <i>Cytokine.</i> 28,3: 109-23.</li><li>3. Varas A et al. (1998) <i>Dev Immunol.</i> 6,1-2: 141-7.</li><li>4. Abbas AK et al. (2018) <i>Sci Immunol.</i> 3,25: eaat1482.</li></ol>

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SDS-PAGE analysis of GMP<sup>®</sup> Human IL-2 Protein

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