PRODUCT INFORMATION

Croyez GMP® IL-10 (Interleukin-10), Human

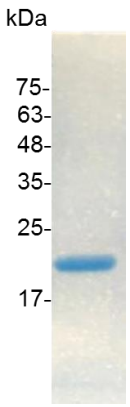
Catalog number	C01012-GMP-100 / C01012-GMP-1000
Package	100 µg / 1 mg
Description	Interleukin-10 (IL-10), also known as human cytokine synthesis inhibitory factor (CSIF), is an anti-inflammatory cytokine. In humans, IL-10 is encoded by the IL-10 gene. IL-10 signals through a receptor complex consisting of two IL-10 receptor-1 and two IL-10 receptor-2 proteins. Consequently, the functional receptor consists of four IL-10 receptor molecules. IL-10 binding induces STAT3 signaling via the phosphorylation of the cytoplasmic tails of IL-10 receptor-1 + IL-10 receptor-2 by JAK1 and Tyk2 respectively.
Source	*Escherichia coli* Animal-free reagent and laboratory Manufactured and tested under GMP guideline
Sequence	MSAPFSFLSNVKYNFMRIIKYEFILNDALNQSIIRANDQYLTAAALHNLDEAVKFD MGAYKSSKDDAKITVILRISKTQLYVTAQDEDQPVLLKEMPEIPKTITGSETNLLF FWETHGTKNYFTSVAHPNLFIATKQDYWVCLAGGPPSITDFQILENQA 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 MC/9-2 cells proliferation. The ED_{50} for this effect is <1 ng/mL. The specific activity of recombinant human IL-10 is approximately >1 $x10^6$ IU/ mg.
Purity	>98% as determined by SDS-PAGE. Purified by Ni-NTA chromatography.
Formulation	The protein was lyophilized from a solution containing 1X PBS, pH 8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile H_2O to a concentration not less than 100 µg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.
Storage	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. Saraiva M, O'Garra A. (2010) *Nat Rev Immunol.* 10,3: 170-81.
2. Ouyang W, O'Garra A. (2019) *Immunity.* 50,4: 871-891.
3. Gabryšová, L. et al. (2014) *Curr Top Microbiol Immunol.* 380: 157-90.
4. Moore, KW. et al. (2001) *Annu Rev Immunol.*19: 683-765.



SDS-PAGE analysis of Croyez GMP® IL-10, Human

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