

PRODUCT INFORMATION

Croyez GMP® GM-CSF

v. 230901

(Granulocyte-macrophage colony-stimulating factor), Human

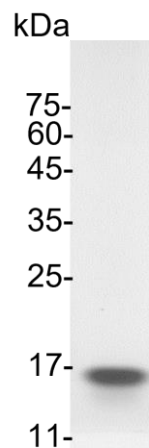
Catalog number	C01116-GMP-100 / C01116-GMP-1000
Package	100 µg / 1 mg
Description	Granulocyte-macrophage colony-stimulating factor (GM-CSF), also known as colony-stimulating factor 2 (CSF2), is a monomeric glycoprotein secreted by macrophages, T cells, mast cells, natural killer cells, endothelial cells and fibroblasts that functions as a cytokine. GM-CSF also plays a role in embryonic development by functioning as an embryokine produced by reproductive tract.
Expression System	<i>Escherichia coli</i>
Species of Origin	Human
Affinity Tag	His Tag (N-term)
Sequence	Ala18-Glu144
Endotoxin level	<0.05 EU per 1 µg of the protein by the LAL method.
Activity	Measure by its ability to induce TF-1 cells proliferation. The ED ₅₀ for this effect is <80 pg/mL. The specific activity of recombinant human GM-CSF is approximately >1 x 10 ⁷ IU/mg.
Purity	>98% as determined by SDS-PAGE analysis.
Mycoplasma	Not detected
Form	Lyophilized
Storage Buffer	Lyophilized from a 0.2 µm filtered solution of PBS, pH 8.0.
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	<p>This product is stable after storage at:</p> <ul style="list-style-type: none"> -20°C for 12 months in lyophilized state from date of receipt. -20°C or -80°C for 1 month under sterile conditions after reconstitution. <p>Avoid repeated freeze/thaw cycles.</p>
Specification	Croyez GMP® recombinant proteins are manufactured in ISO 13485:2016 and

GMP-certified facility. The processes include:

- 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. Becher B. et al. (2016) *Immunity*. 45,5: 963-973.
2. Shi Y. et al. (2006) *Cell research*. 16,2: 126-33.
3. Hamilton JA. (2015) *Expert Rev Clin Immunol*. 11,4: 457-65.
4. Hamilton JA, Anderson GP. (2004) *Growth Factors*. 22,4: 225-31.



SDS-PAGE analysis of Croyez GMP® GM-CSF, Human

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