

Rev03
Update: Dec,14,2021

DATASHEET

GM-CSF, Human (P. pastoris-expressed)

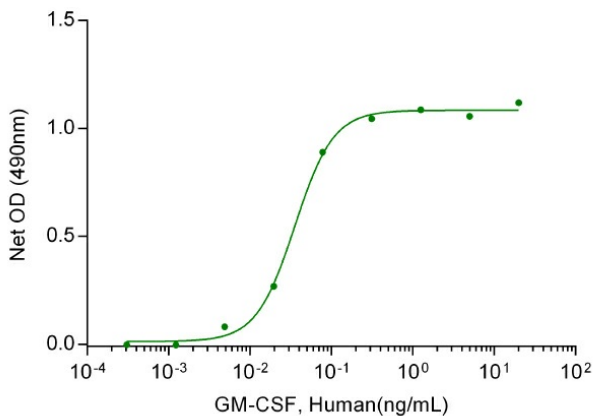
Cat. No.: Z02694

Product Introduction

Species	Human
Protein Construction	Expressed with an N-terminal Met. GM-CSF (Ala18-Glu144) Accession # P04141
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 1 EU/ μ g of protein by gel clotting method
Biological Activity	ED ₅₀ < 0.1 ng/ml, measured by proliferation assay of TF-1 cells, corresponding to a specific activity of > 1.0×10^7 units/mg.
Expression System	P. pastoris
Apparent Molecular Weight	26~32 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against 10 mM PB, pH 7.0.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O up to 100 μ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Examples

ED₅₀ < 0.2 ng/ml, measured by proliferation assay of TF-1 cells, corresponding to a specific activity of > 5 × 10⁶ units/mg.



Background

Target Background : Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) was initially characterized as a growth factor that can support the in vitro colony formation of granulocyte-macrophage progenitors. Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) is produced by a number of different cell types, including activated T cells, B cells, macrophages, mast cells, endothelial cells, and fibroblasts, in response to cytokine of immune and inflammatory stimuli. Besides granulocyte-macrophage progenitors, Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) is a growth factor for erythroid, megakaryocyte, and eosinophil progenitors. On mature hematopoietic, monocytes/macrophages and eosinophils. Human Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) can induce human endothelial cells to migrate and proliferate. Additionally, Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) can stimulate the proliferation of a number of tumor cell lines, including osteogenic sarcoma, carcinoma, and adenocarcinoma cell lines.

Synonyms : Granulocyte Macrophage Colony Stimulating Factor; CSF-2; MGI-1GM; GM-CSF; Pluripoietin-alpha; Molgramostin; Sargramostim; MGC131935; MGC138897

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.