Rev03
Update: Dec,14,2021

DATASHEET

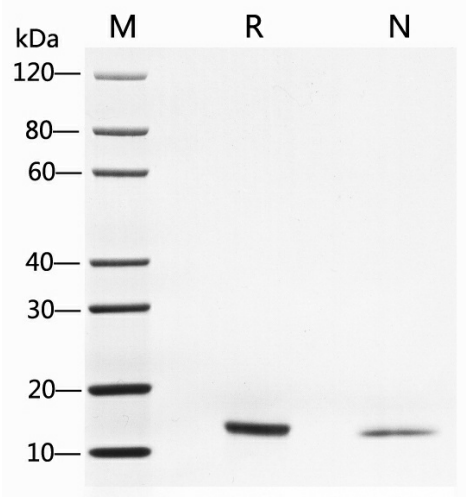
GM-CSF, Human

Cat. No.: Z02695

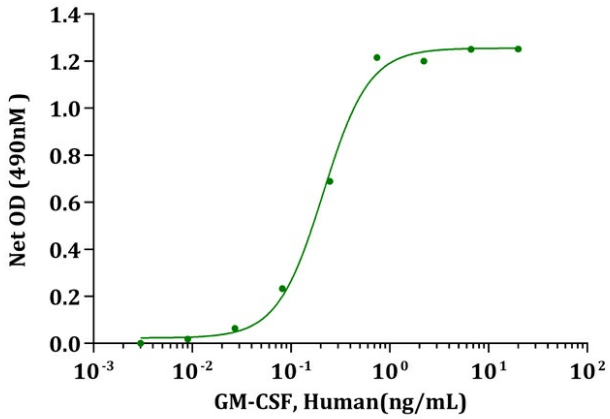
Product Introduction

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/μg of protein by gel clotting method
Biological Activity	ED_{50} < 0.5 ng/ml, measured by proliferation assay of TF-1 cells, corresponding to a specific activity of > 2.0×10^6 units/mg
Expression System	E. coli
Apparent Molecular Weight	~14 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_2O up to 100 μg/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

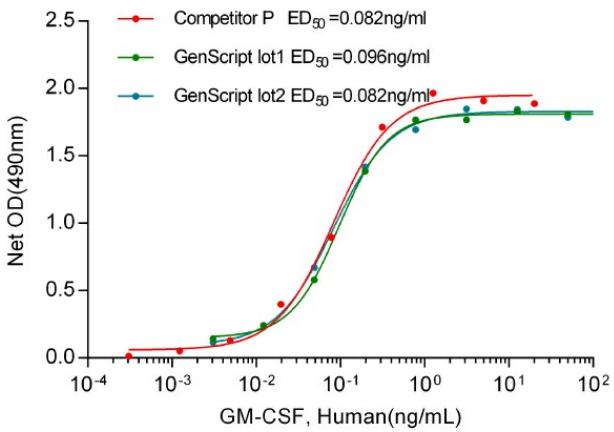


2 μg of GM-CSF, Human (Cat. No. Z02695) was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie Blue staining.



Biological Activity

GM-CSF, Human (Cat. No. Z02695) stimulates cell proliferation of R&D TF-1 cells. The ED_{50} for this effect is less than 0.5ng/mL.



GenScript product showed equal activity compared to competitor P

Background

GenScript USA, Inc.
860 Centennial Ave. Piscataway, NJ 08854
Tel: 1-732-885-9188

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.