

## GFR3 Recombinant Rat GM-CSF

### Description

Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF) is hematopoietic growth factor produced by endothelial cells, monocytes, fibroblasts, and T cells. GM-CSF stimulates the production of neutrophilic granulocytes, macrophages, and mixed granulocyte-macrophage colonies from bone marrow cells. GM-CSF promotes immune system development and regulates neutrophil function during infection. Human and mouse GM-CSF show no cross-reactivity.

<b>Length</b>	125 aa
<b>Molecular Weight</b>	14.3 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P01587
<b>Purity</b>	≥95% determined by reducing and non-reducing SDS-PAGE

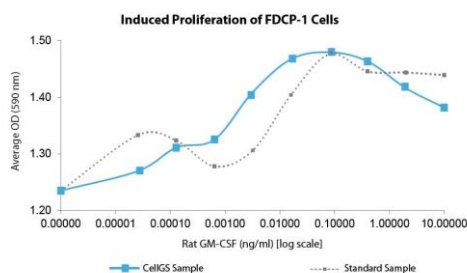
### Specifications

<b>Alternative Names</b>	Granulocyte-Macrophage Colony-Stimulating Factor, GMCSF, CSF-2, MGI1GM, colony stimulating factor 2 (granulocyte-macrophage), colony-stimulating factor, CSF-2, MGII GM, sargramostim, molgramostin
<b>Biological Activity</b>	Rat GM-CSF is fully biologically active when compared to standard. The activity is determined by a proliferation assay using FDCP-1 cells and it is typically less than 20 µg/ml. This corresponds to an expected specific activity of $5 \times 10^7$ units/mg.
<b>Endotoxin Level</b>	≤1.00 EU/µg as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM acetic acid
<b>AA Sequence</b>	MAPTRSPITV TRPWKHVEAI KEALNLLDDM PVTLNEEVEV VSNEFSFKKL TCVQTRLKIF EQGLRGNFTK LKGALNMTAS YYQTYCPPTP ETDCEQVTT YADFIDSLKT FLTDIPFECK KPVQK

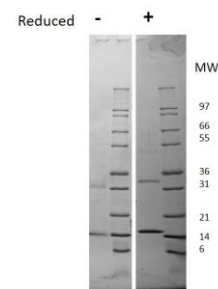
### Preparation and Storage

<b>Reconstitution</b>	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

### Data



Induced proliferation of FDCP-1 cells assay for Rat GM-CSF. Cell proliferation was measured to calculate the ED50, which is as expected less than 20 µg/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 µg of protein was loaded in each lane. Rat GM-CSF has a predicted Mw of 14.7 kDa.