



11 Park Drive, Suite 12
Boston, MA 02215

Rat Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF)

ORDERING INFORMATION

Catalog No: rAP-0073;

Size: 2 µg; 10 µg

Storage: <- 20° C

Synonyms:

CSF-2, MGI-1GM, GM-CSF, Pluripoietin-alpha, Molgramostin, Sargramostim.

Introduction:

GMCSF is a cytokine that controls the production, differentiation, and function of granulocytes and macrophages. The active form of the protein is found extracellularly as a homodimer. This gene has been localized to a cluster of related genes at chromosome region 5q31, which is known to be associated with interstitial deletions in the 5q- syndrome and acute myelogenous leukemia. Other genes in the cluster include those encoding interleukins 4, 5, and 13.

GM-CSF stimulates the growth and differentiation of hematopoietic precursor cells from various lineages, including granulocytes, macrophages, eosinophils and erythrocytes.

Description:

Granulocyte Macrophage Colony Stimulating Factor Rat Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 128 amino acids and having a molecular mass of 14590.65 Dalton. GM-CSF Rat Recombinant is purified by proprietary chromatographic techniques.

Source:

Escherichia Coli.

Physical Appearance:

Sterile Filtered White Lyophilized (freeze-dried) powder.

Formulation:

GM-CSF Rat was lyophilized with no additives.

Solubility:

It is recommended to reconstitute the lyophilized Granulocyte Macrophage Colony Stimulating Factor in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability:

Lyophilized Granulocyte Macrophage Colony Stimulating Factor although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GMCSF should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Purity:

Greater than 95.0% as determined by:

(a)Analysis by RP-HPLC.

(b)Analysis by SDS-PAGE.

Contact & Ordering Information: Angio-Proteomie, 11 Park Drive, Suite 12, Boston, MA 02215, USA. Fax: (480) 247-4337, angioproteomie@gmail.com



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Amino acid sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ala-Pro-Thr-Arg.

Biological Activity:

The ED50 range = 0.001-0.01 ng/ml, determined by the dose dependent proliferation of murine MC/9 cells.

Protein content:

GMCSF quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.966 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated the PC GENE computer analysis program of protein sequences (telliGenetics).
2. Analysis by RP-HPLC, using a calibrated solution of GM-CSF as a Reference Standard.

Usage:

Angio-Proteomie's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.