



11 Park Drive, Suite 12  
Boston, MA 02215

## Human Granulocyte-Colony Stimulating Factor (G-CSF)

### ORDERING INFORMATION

Catalog No: rAP-0064;

Size: 2 µg; 10 µg

Storage: <- 20° C

### Synonyms:

CSF-3, MGI-1G, GM-CSF beta, Pluripoietin, Filgrastim, Lenograstim, G-CSF, MGC45931, GCSF.

### Introduction:

GCSF is a cytokine that controls the production, differentiation, and function of granulocytes. The active protein is found extracellularly. Three transcript variants encoding three different isoforms have been found for this gene. Granulocyte/macrophage colony-stimulating factors are cytokines that act in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. This csf induces granulocytes.

### Description:

Granulocyte Colony Stimulating Factor Human Recombinant produced in E.coli is a single, non-glycosylated, polypeptide chain containing 175 amino acids and having a molecular mass of 18.8 KD. G-CSF is purified by proprietary chromatographic techniques.

### Source:

*Escherichia Coli.*

### Physical Appearance:

Sterile Filtered White Lyophilized (freeze-dried) powder.

### Formulation:

G-CSF was lyophilized after extensive dialysis against 10mM sodium acetate buffer pH= 4.

### Solubility:

It is recommended to reconstitute the lyophilized Granulocyte 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 Colony Stimulating Factor although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GCSF 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.**

### Amino acid sequence:

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

### Purity:

Greater than 98.0% as determined by:

Analysis by RP-HPLC.

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](mailto:angioproteomie@gmail.com)



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**Biological Activity:**

The ED50, calculated by the dose-dependant proliferation of murine NFS-60 indicator cells (measured by <sup>3</sup>H-thymidine uptake) is < 0.1 ng/ml, corresponding to a Specific Activity of  $1 \times 10^8$  IU/mg.

**Protein content:**

G-CSF quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.815 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a calibrated solution of GCSF 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.