



## Human G-CSF

### Human Granulocyte Colony-Stimulating Factor, recombinant

Synonyms: CSF-3, MGI-1G, GM-CSF beta, Pluripoietin, Filgrastim, Lenograstim.

*PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING*

Size	Order#	Lot#	Expiry Date
2 µg	1430.950.002		
10 µg	1430.950.010		
100 µg	1430.950.100		
1 mg	1430.950.199		

Please enquire for bulk quantities and other vial sizes.

### Description

Recombinant human G-CSF is an 18.8 kDa protein consisting of 175 amino acid residues. G-CSF is a hematopoietic factor that stimulates the development of committed progenitor cells to neutrophils and enhances the functional activities of the mature end-cell. It is produced in response to specific stimulation by a variety of cells including macrophages, fibroblasts, endothelial cells and bone marrow stroma. G-CSF is being used clinically to facilitate haematopoietic recovery after bone marrow transplantation. Human and murine G-CSF are cross-species reactive.

- **Biological Activity**  $\geq 1 \times 10^8$  IU/mg
- **Source** *E. coli*
- **Purity**  $\geq 98$  % (SDS-PAGE, HPLC)
- **Endotoxin Level**  $\leq 0.1$  ng/µg ( $\leq 1$  EU/µg)
- **Stabilizer** None
- **Buffer** Sodium acetate (10mM; pH 4.0)\*
- **Physical State** Sterile filtered, lyophilized

### Biological Activity

The ED<sub>50</sub> of  $\leq 0.1$  ng/ml was determined by the dose-dependent stimulation of the proliferation of murine M-NSF-60 cells. It corresponds to a specific activity of  $\geq 1.0 \times 10^8$  IU/mg.

### Reconstitution

We recommend a quick spin followed by reconstitution in sterile 20mM Acetic acid (AcOH) r to a concentration of 0.1-1.0 mg/ml. This solution can then be diluted into other aqueous solutions and stored at 4°C for 1 week or below -20°C for future use.

### Stability

The lyophilized protein is stable for at least 2 years from date of receipt at -20°C. Reconstituted G-CSF is stable for at least 3 months when stored in working aliquots with a carrier protein at -20°C. **Please avoid repeated freeze-thaw cycles.**

### Amino Acid Sequence

MTPLGPASSL PQSFLKCLE QVRKIQGDGA ALQEKLCATY KLCHPEELVL LGHSLGIPWA PLSSCPSQAL  
 QLAGCLSQHL SGLFLYQGLL QALEGISPEL GPTLDTLQLD VADFATTIWQ QMEELGMAPA LQPTQGAMPA  
 FASAFQRRAG GVLVASHLQS FLEVSRYVLR HLAQP

**Usage:** For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

\*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.