

# **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 ≥ 1 x 10<sup>8</sup> IU/mg

• Source E. Coli

Purity ≥ 98 % (SDS-PAGE, HPLC)
Endotoxin level ≤ 0.1ng/µg (≤ 1EU/µg)

• Stabilizer None

Buffer Sodium acetate (10mM; pH 4.0)\*
Physical state Sterile filtered, lyophilized

# **Biological Activity**

The ED<sub>50</sub> of  $\leq$  0.1ng/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 x 10<sup>8</sup> IU/mg.

#### Reconstitution

We recommend a quick spin followed by reconstitution in sterile 20mM Acetic acid (AcOH) r to a concentration of 0.1-1.0mg/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 PQSFLLKCLE QVRKIQGDGA ALQEKLCATY KLCHPEELVL LGHSLGIPWA PLSSCPSQAL QLAGCLSQLH SGLFLYQGLL QALEGISPEL GPTLDTLQLD VADFATTIWQ QMEELGMAPA LQPTQGAMPA FASAFQRRAG GVLVASHLQS FLEVSYRVLR HLAQP

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

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