



## Product Datasheet

<b>Product Name</b>	Granulocyte-Colony Stimulating Factor Human Recombinant, CHO
<b>Cata No</b>	CB500231
<b>Source</b>	<i>Chinese Hamster Ovary Cells (CHO).</i>
<b>Synonyms</b>	CSF-3, MGI-1G, GM-CSF beta, Pluripoietin, Filgrastim, Lenograstim, G-CSF, MGC45931, GCSF.

### Description

Granulocyte Colony Stimulating Factor is a growth factor and/or cytokine produced by the endothelium, macrophages and a number of other immune cells. GCSF stimulates the bone marrow to produce granulocytes and also to stimulate the survival, proliferation, differentiation and function of neutrophil granulocyte progenitor cells and mature neutrophils.

Granulocyte Colony Stimulating Factor Human Recombinant produced in E.coli is a single, glycosylated, polypeptide chain containing 174 amino acids and having a molecular mass of approximately 18 kDa.

G-CSF is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered White Lyophilized (freeze-dried) powder.

### 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 1.27 x 10<sup>8</sup> IU/mg.

### Purity

Greater than 98.0% as determined by:

Analysis by RP-HPLC.

Analysis by SDS-PAGE.

### Formulation

G-CSF was lyophilized from a concentrated (1mg/ml) solution containing 10mM Hydrochloric Acid pH=6.5, 0.4mg tween 20, 100mg mannitol, 160 mg L-arginine, 40 mg phenylalanin and 4mg methionin.

### Stability

Lyophilized Granulocyte Colony Stimulating Factor although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution G-CSF 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.**

### Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be

Thr-Pro-Leu-Gly-Pro.

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