

## CSF3

### Recombinant Human Granulocyte Colony-Stimulating Factor

<b>Catalog No.</b>	CRG300A CRG300B CRG300C	<b>Quantity:</b>	2 µg 10 µg 1.0 mg
<b>Alternate Names:</b>	Granulocyte colony-stimulating factor, G-CSF, CSF3, Filgrastim, Lenograstim, Pluripoietin		
<b>Description:</b>	Granulocyte Colony Stimulating Factor (G-CSF) is a pleiotropic cytokine best known for its specific effects on the proliferation, differentiation, and activation of hematopoietic cells of the neutrophilic granulocyte lineage. It is produced mainly by monocytes and macrophages upon activation by endotoxin, TNF- $\alpha$ and IFN- $\gamma$ . Other cell types including fibroblasts, endothelial cells, astrocytes and bone marrow stromal cells can also secrete G-CSF after LPS, IL-1 or TNF- $\alpha$ activation. In addition, various carcinoma cell lines and myeloblastic leukemia cells can express G-CSF constitutively. Human and mouse G-CSF are cross-reactive.		
<b>Gene ID:</b>	1440		
<b>UniProt ID:</b>	P09919		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	18.8 kDa		
<b>Formulation:</b>	Lyophilized from a sterile-filtered aqueous solution containing 20 mM acetic acid, 50 mM NaCl.		
<b>Purity:</b>	>95% by reducing and non-reducing SDS-PAGE		
<b>Endotoxin Level:</b>	$\leq 0.1$ EU/ $\mu$ g of protein by kinetic LAL analysis.		
<b>Biological Activity:</b>	ED <sub>50</sub> $\leq 60$ pg/ml, determined by dose-dependent proliferation by NFS-60 cells.		
<b>Specific Activity:</b>	$\geq 1.7 \times 10^7$ U/mg The specific activity of Human G-CSF is approximately $3.9 \times 10^4$ IU/ $\mu$ g, which is calibrated against recombinant human G-CSF WHO International Standard (NIBSC code: 09/136).		
<b>Amino Acid Sequence:</b>	MTPLGPASSL PQSFLLKCLE QVRKIQGDGA ALQEKLCATY KLCHPEELVL LGHSLGIPWA PLSSCPSQAL QLAGCLSQLH SGLFLYQGLL QALEGISPEL GPTLDTLQLD VADFATTIWQ QMEELGMAPA LQPTQGAMPA FASAFQRRAG GVLVASHLQS FLEVSRYRVLRL HLAQP		
<b>Reconstitution:</b>	<b>Centrifuge vial prior to opening.</b> Add sterile distilled water to a concentration of 0.1 mg/ml. <b>DO NOT VORTEX.</b> Allow several minutes for complete reconstitution. Further dilution should be made in appropriate buffered solutions.		



**Storage & Stability:**

Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.

**Avoid repeated freeze-thaw cycles.**

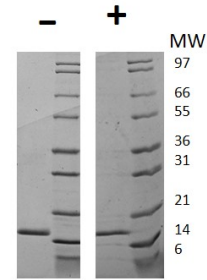
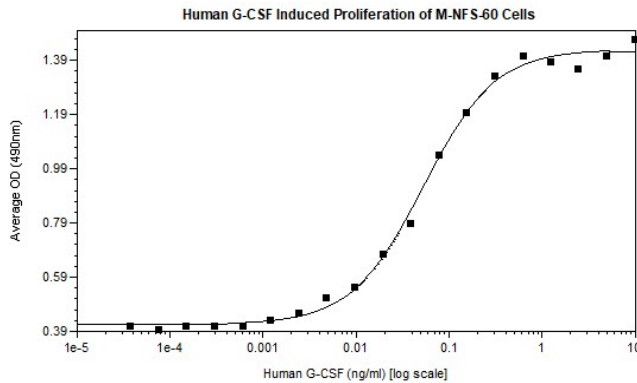
**Human G-CSF**

Figure: 1 ug in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human G-CSF has a predicted MW of 18.8 kDa.

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**



**Cell Sciences®**  
65 Parker Street  
Unit 11  
Newburyport, MA 01950

Toll Free: 888-769-1246  
Phone: 978-572-1070  
Fax: 978-992-0298

E-mail: [info@cellsciences.com](mailto:info@cellsciences.com)  
Website: [www.cellsciences.com](http://www.cellsciences.com)