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CSF3

Recombinant Human Granulocyte Colony-stimulating Factor, Animal Free

Catalog No. CRG300A-AF **Quantity**: 2 μg

CRG300B-AF 10 μg CRG300C-AF 1.0 mg

Alternate Names: Granulocyte colony-stimulating factor, G-CSF, CSF3, Filgrastim, Lenograstim,

Pluripoietin

Description: 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-a and IFN-g. Other cell types including fibroblasts, endothelial cells, astrocytes and bone marrow stromal cells can also secrete G-CSF after LPS, IL-1 or TNF-a activation. In addition, various carcinoma cell lines and myeloblastic leukemia cells can express G-CSF constitutively. Human and mouse G-

CSF are cross-reactive.

Gene ID: 1440

UniProt ID: P09919

Source: E. coli

Molecular Weight: 18.8 kDa (175 aa)

Formulation: Lyophilized from a sterile-filtered aqueous solution containing 20 mM acetic acid, 50 mM

NaCl.

Purity: >95% by reducing and non-reducing SDS-PAGE

Endotoxin Level: $\leq 0.1 \text{ EU/}\mu\text{g}$ of protein by kinetic LAL analysis.

Biological Activity: ED₅₀ \leq 60 pg/ml, determined by dose-dependent _proliferation by NFS-60 cells.

Specific Activity: $\geq 1.7 \times 10^7 \text{ U/mg}$

The specific activity of Human G-CSF is approximately 3.9 x 10^4 IU/ μ g, which is calibrated against recombinant human G-CSF WHO International Standard (NIBSC

code: 09/136).

Amino Acid Sequence: MTPLGPASSL PQSFLLKCLE QVRKIQGDGA ALQEKLCATY KLCHPEELVL

LGHSLGIPWA PLSSCPSQAL QLAGCLSQLH SGLFLYQGLL QALEGISPEL GPTLDTLQLD VADFATTIWQ QMEELGMAPA LQPTQGAMPA FASAFQRRAG

GVLVASHLQS FLEVSYRVLR HLAQP

Reconstitution: Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1

mg/ml. DO NOT VORTEX. Allow several minutes for complete reconstitution. Further

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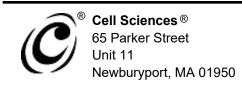
Website: <u>www.cellsciences.com</u>

dilutions should be made in appropriate buffered solutions.

Toll Free: 888-769-1246

Phone: 978-572-1070

Fax: 978-992-0298

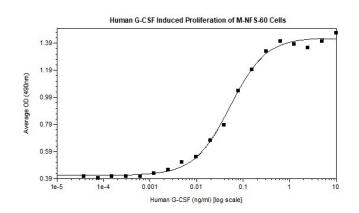


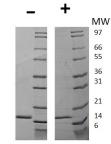
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Storage & Stability:

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.

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Website: www.cellsciences.com

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

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