

Growth Factor Data Sheet

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Colony Stimulating Factor 3 (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 mainly produced by monocytes and macrophages upon activation by endotoxins. Various carcinoma cell lines and myeloblastic leukemia cells can express CSF3 constitutively. In humans, two distinct cDNA clones for CSF3 have been isolated. Both proteins have a 30 amino acid signal peptide and have nearly identical amino acid sequences. Human CSF3 is 73% identical at the amino acid level to murine CSF3 and the two proteins show species cross-reactivity.

Catalog Number	1120-02
Product Name	CSF3 (G-CSF), Human Recombinant Human Colony Stimulating Factor 3 CSF3 G-CSF Granulocyte Colony-Stimulating Factor Pluripoietin
Source	<i>Escherichia coli</i>
MW	~18.7 kDa (174 amino acid)
Sequence	TPLGPASSLP QSFLKCLEQ VRKIQGDGAA LQEKLCATYK LCHPEELVLL GHSLGIPWAP LSSCPSQALQ LAGCLSQLHS GLFLYQGLLQ ALEGISPELG PTLDTLQLDV ADFATTIWQQ MEELGMAPAL PTQGAMPAF ASAFQRRAGG VLVASHLQSF LEVSYRVLRH LAQP
Accession Number	P09919
Purity	>98% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine NFS-60 cells is less than 1.0 ng/ml, corresponding to a specific activity of >1.0 × 10 ⁷ IU/mg.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.