



Recombinant Human Granulocyte Colony

Stimulating Factor

(rhG-CSF)

Catalog Number: 01-0001

Description	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- α and IFN- γ . Other cell types including fibroblasts, endothelial cells, astrocytes and bone marrow stromal cells can also secrete G-CSF after LPS, IL-1 or TNF- α activation. In addition, various carcinoma cell lines and myeloblastic leukemia cells can express G-CSF constitutively. In humans, two distinct cDNA clones for G-CSF, encoding 207 and 204 amino acid precursor proteins, have been isolated. Both proteins have a 30 amino acid signal peptide and have identical amino acid sequences except for a three amino acid insertion (deletion) at the 35th amino acid residue from the N-terminus of the mature protein. Human G-CSF is 73% identical at the amino acid level to murine G-CSF and the two proteins show species cross-reactivity.
Synonyms	CSF-3, MGI-1G, GM-CSF beta, Pluripoietin, Filgrastim, Lenograstim, G-CSF, MGC45931, GCSF, CSF3OS; C17orf33
AA sequence	TPLGPASSLPQSFLKCLEQVRKIQGDGAALQEKLKATYKLCHEPELVLLGHSLGIPWAPLSSCP SQALQLAGCLSQLHSGFLYQGLLQALEGISPELGPTLDTLQLDVAADFATTIWQQMEELGMA PALQPTQGAMPAFASAFQRRAGGVLVASHLQSFLEVSRYRHLRAQP
Source	<i>Escherichia coli</i>
Molecular Weight	Approximately 18.7 kDa, a single non-glycosylated polypeptide chain containing 174 amino acids.
Purity	>98% by SDS-PAGE
Physical Appearance	White lyophilized powder or solution
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution with 10mM NaAc, 5% Mannitol, pH 4.2
Reconstitution	Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0mg/ml.
storage	Store at -20 $^{\circ}$ C after receiving. Upon reconstitution, store at 2-8 $^{\circ}$ C for up to one month. For maximal stability, aliquot and store at -20 $^{\circ}$ C. Avoid repeated freeze/ thaw cycles.
PRICE	RMB 1400 /10 μ g; RMB 5598 /50 μ g
Usage	* This product is for research use only.