Recombinant Human G-CSF (CSF3)

Cat No:HR2R1447

For research use only

Overview

Quantity	10 ?g
Gene Symbol	CSF3
Gene ID	1440
Accession	P09919
Alternative Name	GCSF, CSF-3, MGI-1G, Pluripoietin, Human Granulocyte Colony Stimulating Factor (CSF3)
Species	Human
Source	E. coli
Description	G-CSF is secreted by monocytes, macrophages, and neutrophils after cell activation. It is also produced by stromal cells, fibroblasts, endothelial cells, epithelial carcinomas, acute myeloid leukemia cells, and various tumor cell lines. The synthesis of G-CSF can be induced by bacterial endotoxins, TNF, IL1 and GM-CSF. Comparison of the primary sequence of G-CSF with those of GM-CSF and M-CSF, shows that the three factors are not related to each other. Murine and human G-CSF share a sequence homology (protein) of approximately 70% and exhibit cross reactivity. G-CSF stimulates the proliferation and differentiation of hematopoietic progenitor cells committed to the neutrophils and granulocytes lineage in a dose-dependent manner.
Functions	The ED50 as determined by the dose-dependent proliferation of neuroblastoma cell line was found to be ?5ng/ml
Formulation	Lyophilized from a 0.2 ?m filtered solution in Tris and NaCl (pH 7.5)
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	19
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method
Shipping Condition	Ambient Temperature
Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.