

DATASHEET

Name	G-CSF, REC.MOUSE		
Product	Granulocyte-Colony Stimulating Factor, Recombinant Mouse	Article-No.	40111
Formulation	White powder - lyophilized with no additives	Storage	Freezer at -20°C Prevent freeze-thaw cycles

Introduction:

Granulocyte Colony Stimulating Factor is a growth factor and/or cytokine produced by the endothelium, macrophages and a number of other immune cells. GCSF stimulates the bone marrow to produce granulocytes and also to stimulate the survival, proliferation, differentiation and function of neutrophil granulocyte progenitor cells and mature neutrophils.

Description:

Recombinant Mouse Granulocyte-Colony Stimulating Factor produced in *Escherichia Coli* is a single, non-glycosylated, polypeptide chain containing 179 amino acids and having a molecular mass of 19 KD. rmG-CSF is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Purity: > 95.0% (RP-HPLC & SDS-PAGE)

Solubility:

It is recommended to reconstitute the lyophilised rmG-CSF in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability:

Lyophilised rmG-CSF, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rmG-CSF should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Amino acid sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Val-Pro-Leu-Val.

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Biological Activity:

The ED₅₀ range=0.01-0.03 ng/mL, determined by the dose-dependent proliferation of mouse NFS-60 cells. The optimal concentration for each specific application should be determined by an initial dose-response assay.

Protein content:

Protein quantification was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.51 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a calibrated solution of G-CSF as a reference standard

Usage:

Our products are intended for lab research only. Not for human, animal or diagnostic use.