Granulocyte Colony Stimulating Factor, CHO cells, human recombinant (rHuG-CSF-CHO)

Catalog No: 86420
Lot No: XXXXX
Source: CHO cells
Synonyms: CSF-3, MGI-1G, GM-CSF beta, Pluripoietin, Filgrastim, Lenograstim, G-CSF, MGC45931, GCSF

Background

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 progenator cells and mature neutrophils.

Description

Granulocyte Colony Stimulating Factor human recombinant produced in CHO cells is a single, glycosylated, polypeptide chain containing 174 amino acids and having a molecular mass of approximately 18 kDa. G-CSF is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

G-CSF was lyophilized from a concentrated (1 mg/ml) Phosphate- Buffered Saline, pH 7.4.

Solubility

It is recommended to reconstitute the lyophilized GCSF in sterile 18 MΩ-cm H_2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Granulocyte Colony Stimulating Factor, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution G-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). Please prevent freeze-thaw cycles.

Purity

Greater than 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

TPLGPASSLP QSFLLKCLEQ VRKIQGDGAA LQEKLCATYK LCHPEELVLL GHSLGIPWAP LSSCPSQALQ LAGCLSQLHS GLFLYQGLLQ ALEGISPELG PTLDTLQLDV ADFATTIWQQ MEELGMAPAL QPTQGAMPAF ASAFQRRAGG VLVASHLQSF LEVSYRVLRH LAQP

Activity

The ED50, calculated by the dose-dependant proliferation of murine NFS-60 indicator cells (measured by 3H-thymidine uptake) is <0.07 ng/ml, corresponding to a specific activity of 1.27 x 10^8 IU/mg.

Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.