Granulocyte-Colony Stimulating Factor, pegylated, human recombinant (rHuGCSF-PEG)

Catalog No: 97555
Lot No: XXXXX
Source: *E. coli*
Synonyms: CSF-3, MGI-1G, GM-CSF beta, Pluripoietin, Filgrastim, Lenograstim, G-CSF, MGC45931, GCSF

Background

GCSF is a cytokine that controls the production, differentiation, and function of granulocytes. The active protein is found extracellularly. Three transcript variants encoding three different isoforms have been found for this gene. Granulocyte/macrophage colony-stimulating factors are cytokines that act in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. This csf induces granulocytes.

Description

Granulocyte Colony Stimulating Factor human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 175 amino acids and having a molecular mass of 18.8 kDa. Pegylated G-CSF is produced by attaching a 20 kDa methoxypolyethylene glycol propionaldehyde (mPEG-ALD) to the N-terminal amino acid of G-CSF giving a total molecular mass of 38. 8 kDa. G-CSF is purified by proprietary chromatographic techniques.

Physical Appearance

Colorless, clear and transparent solution.

Formulation

G-CSF is supplied in solution (0.69 mg/ml) containing 10 mM Acetate Buffer (pH 4.0), and 0.004% Polysorbate 80.

Stability

GCSF PEG should be stored refrigerated at 2° to 8°C. Vials should be kept in their packaging to protect from light until the time of use. Shaking and freezing should be avoided.

Purity

Greater than 95.0% as determined by SEC-HPLC.

Activity

The ED50, calculated by the dose-dependent proliferation of murine NFS-60 indicator cells is less than 0.1 ng/ml, corresponding to a specific activity of 10,000,000 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.