California Bioscience
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Product Datasheet

Product Name Granulocyte-Colony Stimulating Factor Human Recombinant

Cata No CB500122

Source Escherichia Coli.

Synonyms CSF-3, MGI-1G, GM-CSF beta, Pluripoietin, Filgrastim, Lenograstim, G-CSF, MGC45931, GCSF.

Description

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.
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 KD.
G-CSF is purified by proprietary chromatographic techniques

Purity

Greater than 98.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE

Biological Activity

The ED50, calculated by the dose-dependant proliferation of murine NFS-60 indicator cells (measured by ^{3}H-thymidine uptake) is < 0.1 ng/ml, corresponding to a Specific Activity of 1 x 10^{8} IU/mg.

Solubility

It is recommended to reconstitute the lyophilized Granulocyte Colony Stimulating Factor in sterile 18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Storage

Lyophilized Granulocyte Colony Stimulating Factor although stable at room temperature for 3 weeks, should be stored desiccated below -18℃. Upon reconstitution GCSF should be stored at 4℃ between 2-7 days and for future use below -18℃.
For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).