DATASHEET
Version 20181206

G-CSF, Human

Cat. No.: Z02974-1

Size: 1.0 mg

Synonyms: CSF-3, C17 or f33,

Description:

Granulocyte Colony-Stimulating Factor (G-CSF) contains internal disulfide bonds. Among the family of colony-stimulating factors, Granulocyte Colony Stimulating Factor (G-CSF) is the most potent inducer of terminal differentiation to granulocytes and macrophages of leukemic myeloid cell lines. The synthesis of Granulocyte Colony Stimulating Factor (G-CSF) can be induced by bacterial endotoxins, TNF, Interleukin-1 and GM-CSF. Prostaglandin E2 inhibits the synthesis of Granulocyte Colony Stimulating Factor (G-CSF). In epithelial, endothelial, and fibroblastic cells secretion of Granulocyte Colony Stimulating Factor (G-CSF) is induced by Interleukin-17.
Recombinant human Granulocyte Colony-Stimulating Factor (rhG-CSF) produced in E. coliis a single non-glycosylated polypeptide chain containing 175amino acids. A fully biologically active molecule, rhG-CSF is obtained by proprietary chromatographic techniques at GenScript, with an apparent molecular mass of 18.8kDa analyzed by reducing SDS-PAGE.

Amino Acid Sequence:

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00001 MTPLGPASSL PQSFLLKCLE QVRKIQGDGA ALQEKLCATY
00041 KLCHPEELVL LGHSLGIPWA PLSSCPSQAL QLAGCLSQLH
00081 SGLFLYQGLL QALEGISPEL GPTLDTLQLD VADFATTIWQ
00121 QMEELGMAPA LQPTQGAMPA FASAFQRRAG GVLVASHLQS
00161 FLEVSYRVLR HLAQP
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Source: *E. coli*

Species: Human

Biological Activity: ED_{50} <0.1ng/ml, measured by a cell proliferation assay of M-NFS-60 cells, corresponding to a specific activity of >1.0× 10^7 IU/mg.

Molecular Weight: 18.8kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against 25mM Tris, pH8.0.

Reconstitution: Reconstituted in ddH_2O at 100 μg/ml.

Purity: > 95% by SDS-PAGE and HPLC analyses.

Endotoxin Level: <0.2 EU/μg, determined by LAL method.

Storage: Lyophilized recombinant human Granulocyte Colony-Stimulating Factor (rhG-CSF) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhG-CSF should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.

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