

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant G-CSF, Human

Catalog Number: BK0061-1mg

Source: Escherichia coli.

Quantity: 1mg

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. coli* is a single non-glycosylated polypeptide chain containing 175 amino 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.

Molecular Weight:

18.8kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE and HPLC analyses.

Biological Activity:

ED50 <0.1ng/ml, measured by a cell proliferation assay of M-NFS-60 cells, corresponding to a specific activity of $>1.0 \times 10^7$ IU/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

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Formulation:

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

AA Sequence:

MTPLGPASSLPQSFLKCLEQVRKIQGDGAALQE
KLCATYKLCHPPEELVLLGHSLGIPWAPLSSCP-
SQALQLAGCLSQLHSGLFLYQGLLQALEGIS-
PELGPTLDTLQLDVADFATTI-
WQQMEELGMAPALQPTQGAMPAFASA-
FQRRAGGVLVASHLQSFLEVSYRVLRLHAQP

Endotoxin:

<0.2 EU/ μ g, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 μ g/ml.

Storage:

Lyophilized recombinant human Granulocyte Colony-Stimulating Factor (rhG-CSF) remains stable up to 6 months at -80 °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.

Usage:

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