

Recombinant Rhesus Macaque Granulocyte Colony Stimulating Factor (rRhG-CSF)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:

112-02

Source:

Escherichia coli.

Molecular Weight:

Approximately 18.9 kDa, a single non-glycosylated polypeptide chain containing 174 amino acids.

Quantity:

 $2\mu g/10\mu g/1000\mu g$

AA Sequence:

TPLGPASSLP QSFLLKCLEQ VRKIQGDGAA LQEKLCATYK LCHPEELVLL RHSLGIPWAP

LSSCPSQALQ LTGCLSQLHS SLFLYQGLLQ ALEGISPELS PTLDTLQLDI ADFATTIWQQ MEDLGMAPAL QPTQGAMPAF TSAFQRRAGG VLVASHLQRF LELAYRVLRH LAQS

Purity:

> 98 % by SDS-PAGE and HPLC analyses.

Biological Activity:

Fully biologically active when compared to standard. The ED_{50} as determined by a cell proliferation

assay using murine NFS-60 cells is less than 0.05 ng/ml, corresponding to a specific activity of > 2.0

 \times 10⁷ IU/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.

Endotoxin:

Less than 0.1 EU/µg of rRhG-CSF as determined by LAL method.

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and

stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature

recommended below.

Stability & Storage:

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

■ 12 months from date of receipt, -20 to -70 °C as supplied.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

• 3 months, -20 to -70 °C under sterile conditions after reconstitution.

Usage:

ChemWhat Limited in UK offers this branded product for research, development or further

evaluation purposes. NOT FOR HUMAN USE.

Rhesus Macaque Granulocyte Colony Stimulating Factor

Granulocyte colony stimulating factor (G-CSF) is a pleiotropic cytokine and mainly produced by monocytes and macrophages upon activation by endotoxin, TNF- α and IFN- γ . Besides, many other cell types can secreted this protein after LPS, IL-1 or TNF- α activation, which are fibroblasts, endothelial cells, astrocytes and bone marrow stromal cells. Various carcinoma cell lines and myeloblastic leukemia cells can express G-CSF constitutively. G-CSF is cytokine that acts in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. In addition it may function in some adhesion or recognition events at the cell surface.

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