

Recombinant Human G-CSF / Granulocyte Colony-Stimulating Factor, Animal Free & Carrier Free

Cat #: C-CYP332

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

G-CSF is a hematopoietic growth factor. It can activate the progress that committed progenitor cells develop to neutrophils and enhance the functional activities of the mature end-cell. It is secreted in response to specific stimulation by a variety of cells, including bone marrow stroma, macrophages, endothelial cells and fibroblasts. In clinical treatment, GCSF is used to facilitate hematopoietic recovery after bone marrow transplantation.

Product Information

Source: *Escherichia Coli*.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

Biological Activity: Measure by its ability to induce proliferation in NFS-60 cells. The ED50 for this effect is <50 pg/mL.

The specific activity of recombinant human G-CSF is > 2 x 10⁷ IU/mg.

Endotoxin: <0.1EU per 1µg of the protein by the LAL method.

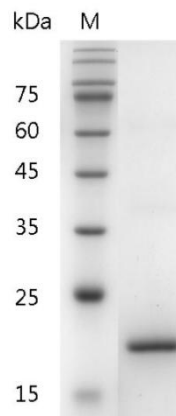
Amino acid sequence:

TPLGPASSLPQSFLKCLEQVRKIQGDGAALQEKLKCATYKLCHPPELVLLGHSLGIPWAPLSSCPSQALQLAGCLSQLHSGFLFYQGLLQALEG

ISPGLGPTLDTLQLDVADFATTIWQQMEELGMAPALQPTQGAMPAFASAFQRRAGGVLVASHLQSFLEVSYRVLRLHQAQP with

polyhistidine tag at the N-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1xPBS, pH 7.4.



SDS-PAGE analysis of recombinant human G-CSF

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H₂O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.