

Recombinant Mouse G-CSF protein(N-His)

Catalog Number: PKSM041499

Note: Centrifuge before opening to ensure complete recovery of vial contents.

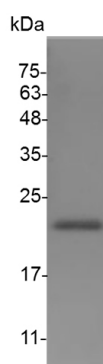
Description

| | |
|----------------------|---|
| Species | Mouse |
| Source | E.coli-derived Mouse G-CSF protein Val 31-Ala 208, with an N-terminal His |
| Calculated MW | 19.8 kDa |
| Observed MW | 17-25 kDa |
| Accession | P09920 |
| Bio-activity | Measure by its ability to induce proliferation in NFS-60 cells. The ED ₅₀ for this effect is <50 pg/mL. The specific activity of recombinant mouse G-CSF is > 2 x 10 ⁷ IU/mg. |

Properties

| | |
|-----------------------|--|
| Purity | > 98 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 0.1 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from sterile PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 98 % as determined by reducing SDS-PAGE.

Background

Granulocyte colony-stimulating factor (G-CSF) is a growth factor and an essential cytokine which belongs to the IL-6 superfamily. 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. G-CSF binding to its receptor G-CSF-R which belongs to the cytokine receptor type I family depends on the interaction of alpha-helical motifs of the former and two fibronectin type III as well as an immunoglobulin-like domain of the latter. G-CSF is a cytokine that have been demonstrated to improve cardiac function and perfusion in myocardial infarction. And it was initially evaluated as a stem cell mobilizer and erythropoietin as a cytoprotective agent.

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