Datasheet for ABIN6699718

G-CSF Protein

2 Images

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Overview

Quantity:	100 µg
Target:	G-CSF (CSF3)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	Human Granulocyte Colony Stimulating Factor Recombinant Protein
Purification:	Granulocyte Colony Stimulating Factor purity was determined to be greater than 95% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-pAGE.
Purity:	95,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is determined by the dose-dependent proliferation of mouse NFS-60 and is typically 10-60 pg/mL.

Target Details

Target:	G-CSF (CSF3)
Alternative Name:	CSF3 (CSF3 Products)
Background:	Synonyms: CSF-3, MGI-1G, GM-CSFβ, pluripoietin

Target Details

	Background: Granulocyte-Colony Stimulating Factor (G-CSF) is a growth factor that is considered the most potent inducer of terminal differentiation to granulocytes and macrophages of leukemic myeloid cell lines. The synthesis of G-CSF can be induced by bacterial endotoxins, TNF, IL-1 and GM-CSF. Prostaglandin E2 inhibits the synthesis of G-CSF, while in epithelial, endothelial, and fibroblastic cells, secretion of G-CSF is induced by IL-17. Human and mouse G-CSF are cross-reactive. Recombinant human G-CSF is a non-glycosylated protein, containing 175 amino acids, with a molecular weight of 18.8 kDa.
UniProt:	P09919
Pathways:	Cellular Response to Molecule of Bacterial Origin, Regulation of Actin Filament Polymerization

Application Details

Application Notes:	Other: User Optimized Application_Note: Granulocyte Colony Stimulating Factor Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Granulocyte Colony Stimulating Factor in immunological assays.
Comment:	Suggested_Applications: Cellular Assay Other_Performance_Data:
Restrictions:	For Research Use only

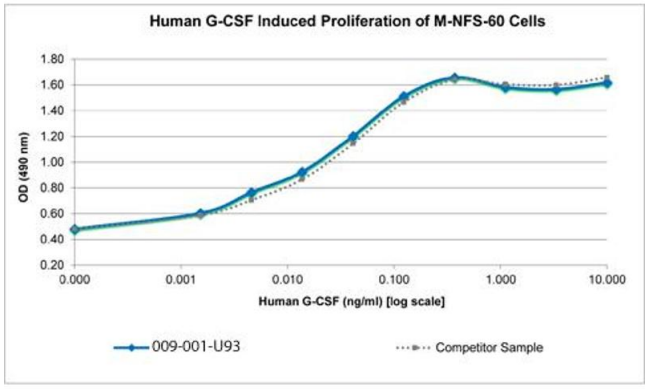
Handling

Format:	Lyophilized
Reconstitution:	Reconstitution_Buffer: Restore with deionized water (or equivalent) Reconstitution_Volume: 100 µL
Buffer:	Lyophilized in 20 mM acetic acid, 50 nM sodium chloride.
Preservative:	Without preservative
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.

Handling

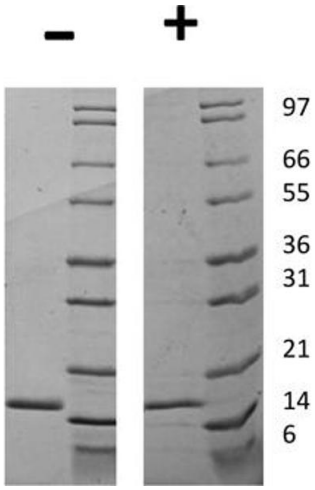
Expiry Date:	6 months

Images



SDS-PAGE

Image 1. SDS-PAGE of Human Granulocyte Colony Stimulating Factor Recombinant Protein Bioactivity of Human Granulocyte Colony Stimulating Factor Recombinant Protein. Serial dilutions of Human G-CSF, starting at 10 ng/mL, were added to NFS-60 cells. After 69 hours, cell proliferation was measured and the linear portion of the curve was us used to calculate the ED50. The ED50 of Human G-CSF is 15-22 pg/mL. This value is comparable to the typical expected 10-60 pg/mL.



SDS-PAGE

Image 2. SDS-PAGE of Human Granulocyte Colony Stimulating Factor Recombinant Protein SDS-PAGE of Human Granulocyte Colony Stimulating Factor Recombinant Protein. Lane 1: 1 µg Human G-CSF in non-reducing conditions . Lane 2: Molecular weight marker. Lane 3: 1 µg Human G-CSF in reducing conditions (+). Lane 4: Molecular weight marker. Human G-CSF has a predicted MW of 18.7 kDa.