Datasheet for ABIN2181135

G-CSF Protein (AA 31-204)

2 Images

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Overview

Quantity:	50 µg
Target:	G-CSF (CSF3)
Protein Characteristics:	AA 31-204
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Brand:	ActiveMax®
Sequence:	AA 31-204
Characteristics:	This protein carries no "tag". The protein has a calculated MW of 18.7 kDa. The protein migrates as 18-21 kDa under reducing (R) condition (SDS-PAGE) due to Glycosylation.
Purity:	>95 % as determined by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	G-CSF (CSF3)
Alternative Name:	G-CSF (CSF3 Products)

Target Details

Background:	Granulocyte colony-stimulating factor (G-CSF or GCSF) is also known as colony-stimulating factor 3, CSF3, C17orf33, CSF3OS, GCSF, MGC45931. It is a glycoprotein, growth factor and cytokine produced by a number of different tissues to stimulate the bone marrow to produce granulocytes and stem cells. G-CSF then stimulates the bone marrow to release them into the blood. G-CSF also stimulates the survival, proliferation, differentiation, and function of neutrophil precursors and mature neutrophils. G-CSF regulates them using Janus kinase (JAK)/signal transducer and activator of transcription (STAT) and Ras /mitogen-activated protein kinase (MAPK) and phosphatidylinositol 3-kinase (PI3K)/protein kinase B (Akt) signal transduction pathway. G-CSF is produced by endothelium, macrophages, and a number of other immune cells. The natural human glycoprotein exists in two forms, a 174- and 180-amino-acid-long protein of molecular weight 19,600 grams per mole. G-CSF can effect on the hematopoietic system and neuronal cells as a neurotrophic factor. The action of G-CSF in the central nervous system is to induce neurogenesis, to increase the neuroplasticity and to counteract apoptosis. G-CSF stimulates the production of white blood cells (WBC). In oncology and hematology, a recombinant form of G-CSF is used with certain cancer patients to accelerate recovery from neutropenia after chemotherapy, allowing higher-intensity treatment regimens. Another form of recombinant human G-CSF called lenograstim is synthesised in Chinese Hamster Ovary cells (CHO cells). The recombinant human G-CSF synthesised in an E. coli expression system is called filgrastim.
Molecular Weight:	18.7 kDa
NCBI Accession:	NP_757373
Pathways:	Cellular Response to Molecule of Bacterial Origin, Regulation of Actin Filament Polymerization

Application Details

Restrictions:	For Research Use only

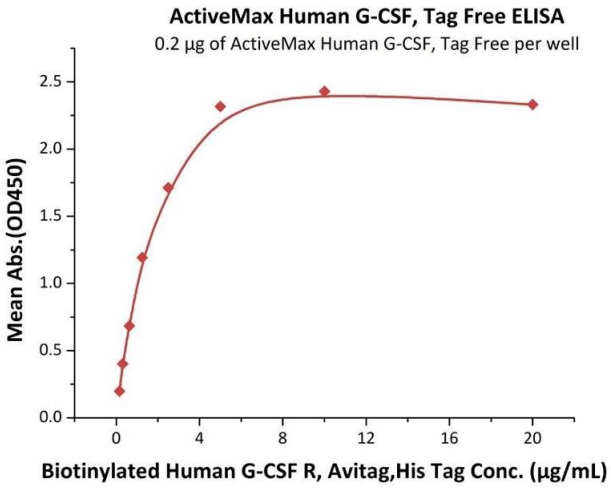
Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	No activity loss was observed after storage at: In lyophilized state for 1 year (4 °C-8 °C), After

Handling

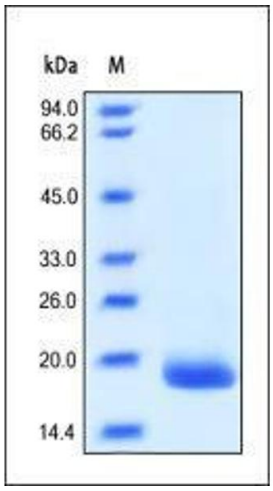
reconstitution under sterile conditions for 1 month (4 °C-8 °C) or 3 months (-20 °C to -70 °C).

Images



ELISA

Image 1. Immobilized Human G-CSF, Tag Free (ABIN2181135,ABIN2693589) at 2 μg/mL (100 μL/well) can bind Biotinylated Human G-CSF R, Avitag,His Tag (ABIN3137667,ABIN4369370) with a linear range of 0.156-1.25 μg/mL (QC tested).



SDS-PAGE

Image 2.