

Human G-CSF Protein

Cat. No. CSF-HM201



Description

Source	Recombinant Human G-CSF Protein is expressed from HEK293 with hFc tag at the N-terminus. It contains Thr31-Pro204.
Accession	NP_757373.1
Molecular Weight	The protein has a predicted MW of 44.20 kDa. Due to glycosylation, the protein migrates to 45-50 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

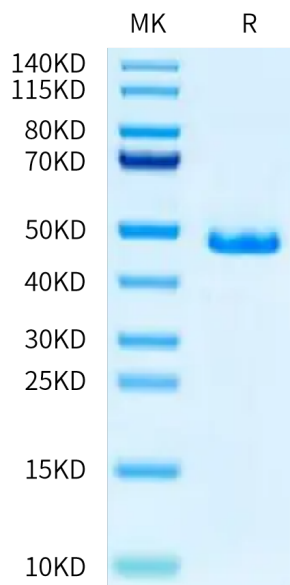
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Granulocyte colony-stimulating factor (G-CSF) is an hemopoietic growth factor produced by fibroblasts, monocytes and endothelial cells. G-CSF is expressed by numerous cell types including neuronal, immune and endothelial cells. G-CSF is released in autocrine manner and binds to its receptor G-CSF-R which further activates numerous signaling transduction pathways including PI3K/AKT, JAK/STAT and MAP kinase, and thereby promote neuronal survival, proliferation, differentiation, mobilization of hematopoietic stem and progenitor cells.

Assay Data

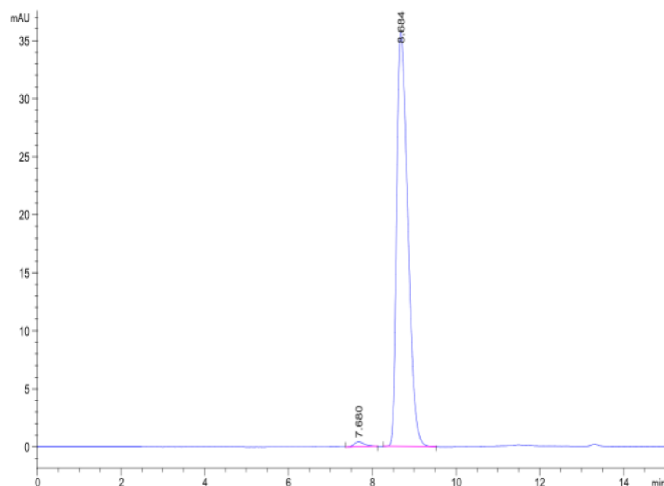
Bis-Tris PAGE



Human G-CSF on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data

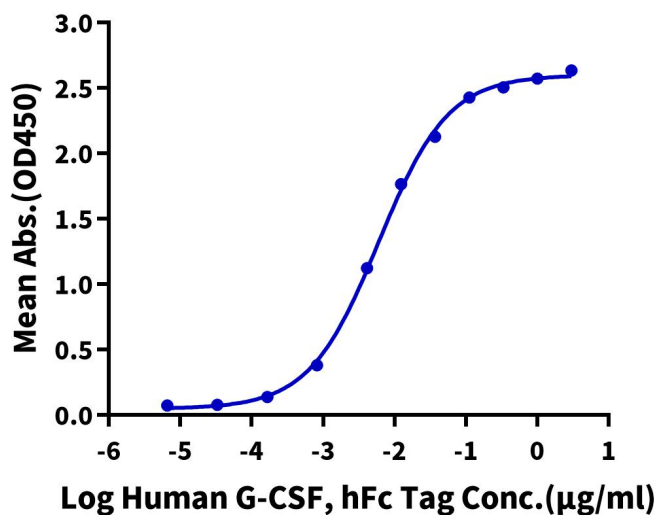


The purity of Human G-CSF is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human G-CSF, hFc Tag ELISA

0.1µg Human G-CSF R, His Tag Per Well



Immobilized Human G-CSF R, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human G-CSF, hFc Tag with the EC50 of 6.0ng/ml determined by ELISA.