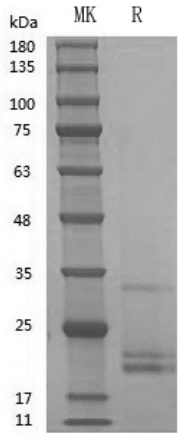
Product Name: GMP Recombinant Human G-CSF
Catalog#: PCH90053

Summary

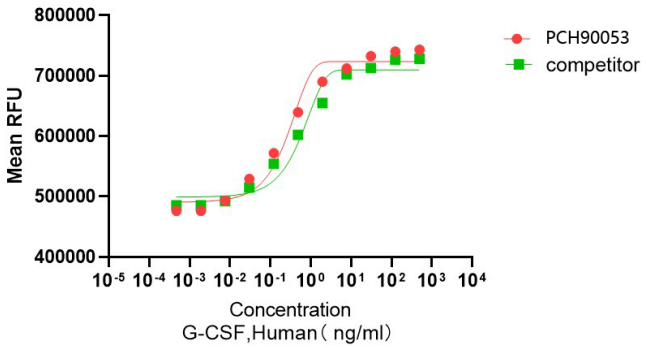
Name	G-CSF
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	≤10 EU/mg
Construction	Recombinant Human G-CSF is produced by our Mammalian cell expression system and the target gene encoding Thr31-Pro204 is expressed.
Accession #	P09919
Tag	Tag free
Host	Mammalian cell
Species	Human
Predicted MW	18.7 kDa
Form	Lyophilized
Buffer	PBS,5% mannitol and 0.01% Tween 80, pH7.4
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at ≤-70°C, stable for 6 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SDS-PAGE image

Product Name: GMP Recombinant Human G-CSF
Catalog#: PCH90053



Bioactivity image



The ED50 for this effect is < 0.5 ng/ml, corresponding to a specific activity of ≥ 1×107 units/mg.

Background

Alternative Names

Granulocyte Colony-Stimulating Factor; G-CSF; Pluripoietin; Filgrastim; Lenograstim; CSF3; C17orf33; GCSF

References

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.

Note

For research use only .