

Recombinant Mouse G-CSF protein (His Tag)

Catalog Number: Eg0256

Basic Information

Species:
Mouse

Purity:
>90 %, SDS-PAGE

Tag:
His Tag

Technical Specifications

Purity:

>90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µg protein, LAL method

Source:

HEK293-derived Mouse G-CSF protein Val31-Ala208 (Accession# P09920) with a His tag at the C-terminus.

GeneID:

12985

Accession:

P09920

Predicted Molecular Mass:

22.8 kDa

SDS-PAGE:

24-32 kDa, reducing (R) conditions

Formulation:

Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Granulocyte colony-stimulating factor (G-CSF), also referred to as CSF3, is a protective cytokine with anti-inflammatory effects. G-CSF is important in promoting survival of the granulocytic lineage cells and proliferation and migration of neutrophils as well as trophoblast cells. G-CSF acts by binding to its receptor G-CSFR (also called CSF3R), which after binding with G-CSF activates the canonical Janus kinase (Jak)/signal transducer, activator of transcription (STAT) and Ras/Raf/MAP kinase pathways. G-CSF potently stimulates the proliferation and release of peripheral blood progenitor cells into the bloodstream and is therefore used to treat neutropenia after chemotherapy. Furthermore, G-CSF levels are elevated upon intensive exercise leading to increased neutrophil counts, which are predominantly due to delayed neutrophil apoptosis.

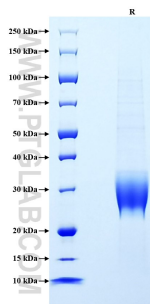
References

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2. Zhao SQ. et al. (2015). Zhongguo Shi Yan Xue Ye Xue Za Zhi. 23(3):871-7.
3. Sheridan WP. et al. (1989). Lancet. 2(8668):891-5.
4. Sheridan WP. et al. (1992). 339(8794):640-4.
5. Yamada M. et al. (2002). 92(5):1789-94.
6. Mooren FC. Et. AL (2012). 113(7):1082-90.

Synonyms

Csf3, G-CSF, Csf, G CSF, Granulocyte colony-stimulating factor

Selected Validation Data



Purity of Recombinant Mouse G-CSF was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.