



# Recombinant Human G-CSF

<b>Catalog #</b>	EPT163
<b>Expression Host</b>	E.coli
<b>DESCRIPTION</b>	Recombinant Human Granulocyte Colony-Stimulating Factor is produced by our E.coli expression system and the target gene encoding Thr31-Pro204 is expressed.
<b>Accession</b>	P09919-2
<b>Synonyms</b>	Granulocyte Colony-Stimulating Factor; G-CSF; Pluripoietin; Filgrastim; Lenograstim; CSF3; C17orf33; GCSF
<b>Mol Mass</b>	18.8 KDa
<b>AP Mol Mass</b>	16 kDa, reducing conditions
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Less than 0.001 ng/μg (0.01 EU/μg) as determined by LAL test.
<b>FORMULATION</b>	Lyophilized from a 0.2 μm filtered solution of 10mM HAc-NaAc, 150mM NaCl, 0.004% Tween 80, 5% Mannitol, pH 4.0.





## 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.

## SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

## STORAGE

Lyophilized protein should be stored at  $< -20^{\circ}\text{C}$ , though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at  $4-7^{\circ}\text{C}$  for 2-7 days.

Aliquots of reconstituted samples are stable at  $< -20^{\circ}\text{C}$  for 3 months.

## BACKGROUND

Human Granulocyte-Colony-Stimulating Factor (G-CSF) is 20 kD glycoprotein containing internal disulfide bonds. It induces the survival, proliferation, and differentiation of neutrophilic granulocyte precursor cells and it functionally activates mature blood neutrophils. Among the family of





colony-stimulating factors, G-CSF is 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, Interleukin-1, and GM-CSF. Prostaglandin E2 inhibits the synthesis of G-CSF. In epithelial, endothelial, and fibroblastic cells secretion of G-CSF is induced by Interleukin-17.

## **SDS-PAGE**

