## Product Data:

Product SKU: RPES2407
Species: Human

Size: $10 \mu \mathrm{~g}$
Expression host: E. coli

Uniprot: P09919-2

Protein Information:
Molecular Mass: $\quad 18.8 \mathrm{kDa}$
AP Molecular Mass: 16 kDa

## Tag:

Bio-activity:
Purity: $\quad>95 \%$ as determined by reducing SDS-PAGE.
Endotoxin: $\quad<1.0 \mathrm{EU}$ per $\mu \mathrm{g}$ as determined by the LAL method.
Storage: Lyophilized protein should be stored at $<-20^{\circ} \mathrm{C}$, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at $4-7^{\circ} \mathrm{C}$ for 2-7 days. Aliquots of reconstituted samples are stable at $<-20^{\circ} \mathrm{C}$ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.
Formulation: Lyophilized from a $0.2 \mu \mathrm{~m}$ filtered solution of $10 \mathrm{mM} \mathrm{HAc-NaAc}, 150 \mathrm{mM} \mathrm{NaCl}$, 0.004\% Tween 80, 5\% Mannitol, pH 4.0.

Reconstitution: Please refer to the printed manual for detailed information.

## Application:

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

Immunogen information:
Sequence: Thr31-Pro204

## 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, GCSF 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, and GMCSF. Prostaglandin E2 inhibits the synthesis of G-CSF. In epithelial, endothelial, and fibroblastic cells secretion of G-CSF is induced by Interleukin7.

