

Recombinant Protein Technical Manual Recombinant Human G-CSF/CSF3 Protein

RPES2407

Product Data:

Product SKU: RPES2407 **Size:** 10μg

Species: Human Expression host: E. coli

Uniprot: P09919-2

Protein Information:

Molecular Mass: 18.8 kDa

AP Molecular Mass: 16 kDa

Tag:

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at $4-7^{\circ}$ C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 μm filtered solution of 10mM HAc-NaAc, 150mM 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, 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, and GM-CSF. Prostaglandin E2 inhibits the synthesis of G-CSF. In epithelial, endothelial, and fibroblastic cells secretion of G-CSF is induced by Interleukin7.