


## Human G-CSF Protein

Cat #: PRP1045

Size: 5 µg/20 µg/100 µg/1 mg

### Product Information

	<b>Product Name:</b> Human G-CSF Protein		
<b>REF</b>	<b>Catalog Number:</b> PRP1045	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Purity:</b> >98% as determined by SDS-PAGE		
	<b>Storage:</b> Store at -20°C		<b>Preparation method:</b> <i>E.coli</i>
	<b>Shipping:</b> The product is shipped at ambient temperature.		

**Background:** Granulocyte colony-stimulating factor (G-CSF) is a member of the CSF family of glycoproteins that regulate hematopoietic cell proliferation, differentiation, and function. It is a key cytokine involved in the production of neutrophils and the stimulation of granulocyte colony formation from hematopoietic progenitor cells (Metcalf & Nicola). G-CSF causes a range of effects including a transient reduction of SDF-1 expression, the activation of metalloproteases that cleave VCAM-1, and the release of norepinephrine from the sympathetic nervous system, leading to the release or mobilization of hematopoietic stem cells from the bone marrow into the periphery.

**Sequence:** Amino acid sequence derived from Human G-CSF (Thr31-Pro204) was expressed.

**Protein length:** The recombinant Human G-CSF protein consists of 174 amino acids with a Met in N terminal and predicts a molecular mass of 18.7 kDa.

**Biological Activity:** Measured by its ability to induce proliferation in M-NFS-60 cells. The ED<sub>50</sub> for this effect is 0.3477 ng/mL.

**Endotoxin:** < 1 EU per µg of the protein as determined by the LAL method.

**Formulation:** Lyophilized from sterile 20 mM tris 150 mM NaCl, pH 7.5.

**Storage Instructions:** The recombinant Human G-CSF protein product should be stored desiccated below -20°C. The protein should be stored at 4°C between 2-7 days and for future use below -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Usage notes:** Always centrifuge tubes before opening. It is recommended to dilute the protein using the PBS buffer or Protein storage solution to working concentration.

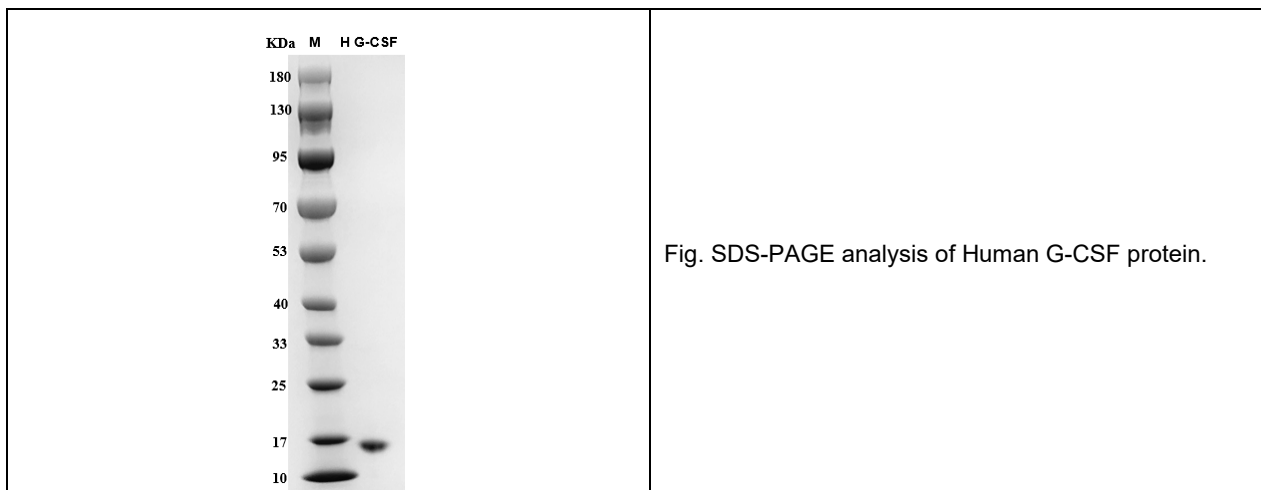


Fig. SDS-PAGE analysis of Human G-CSF protein.

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