


Mouse G-CSF protein

Cat #: PRP1308

Size: 5 ug/20 ug/100 ug/1 mg

Product Information

	Product Name: Mouse G-CSF protein		
REF	Catalog Number: PRP1308	LOT	Lot Number: Refer to product label
	Purity: > 98 % as determined by SDS-PAGE		
	Storage: Store at -20°C		Preparation method: <i>E. coli</i>
	Shipping: The product is shipped at ambient temperature.		

Background: Granulocyte-colony stimulating factor (G-CSF) is a growth factor and an essential cytokine belonging to the CSF family of hormone-like glycoproteins. It is produced by numerous cell types including immune and endothelial cells. G-CSF binding to its receptor G-CSF-R which belongs to the cytokine receptor type I family depends on the interaction of alpha-helical motifs of the former and two fibronectin type III as well as an immunoglobulin-like domain of the latter. Recent animal studies have also revealed that G-CSF activates multiple signaling pathways, such as Akt and also the Janus family kinase-2 and signal transducer and activation of transcription-3 (Jak2-STAT3) pathway, thereby promoting survival, proliferation, differentiation and mobilisation of haematopoietic stem and progenitor cells.

Sequence: Amino acid sequence derived from Mouse G-CSF protein (P09920) (V31-A208) was expressed.

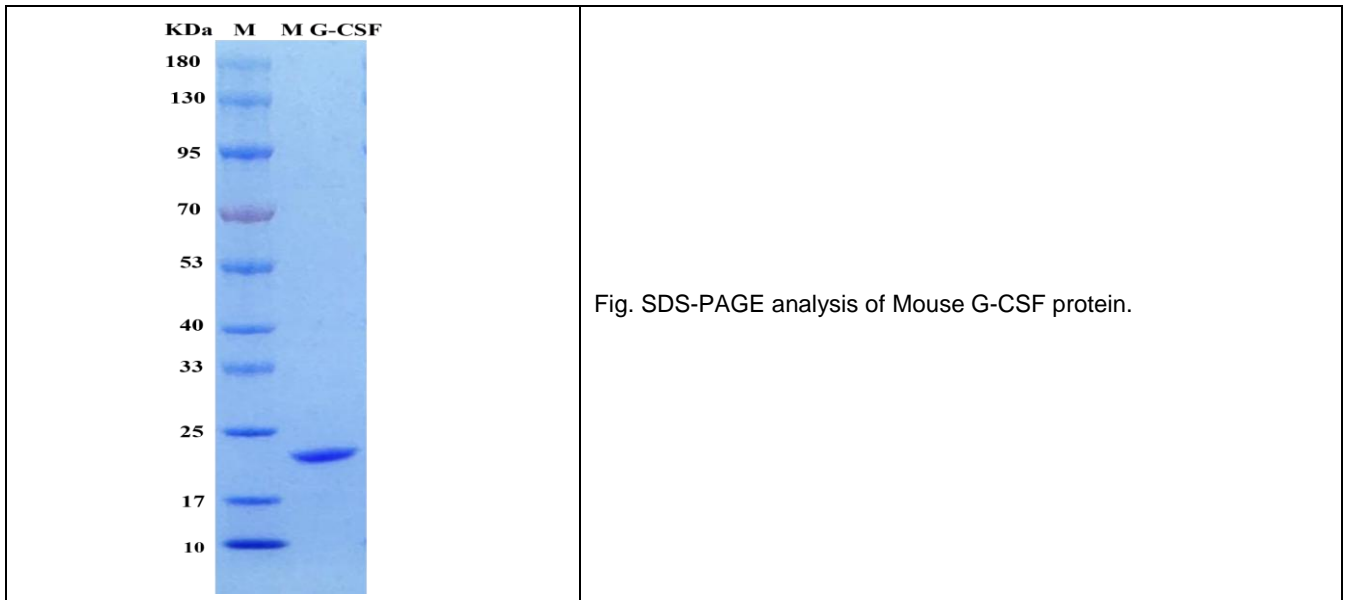
Protein length: The Recombinant Mouse G-CSF protein consists of 178 amino acids and predicts a molecular mass of 18.95 KDa

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

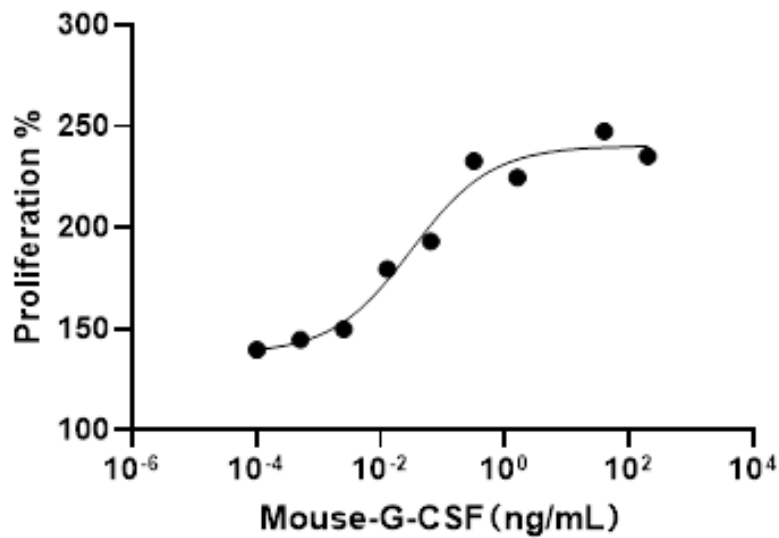
Formulation: Lyophilized from sterile 20 mM Tris with 150 mM NaCl, pH 7.4.

Storage Instructions: Lyophilized Mouse G-CSF protein product should be stored desiccated below -20°C. Upon reconstitution, 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 reconstitute the lyophilized Mouse G-CSF protein using the buffer we provided not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.



Biological Activity: Measured by its ability to induce proliferation in M-NFS-60 cells. The ED₅₀ for this effect is 0.03 ng/mL. The specific activity of recombinant Mouse G-CSF is approximately >3.33 x 10⁷ IU/mg.



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