


CA 1054	<b>HumanKine™ G-CSF</b>			
	<b>Prod. No. S2312-10UG</b>	<b>lot #: PR1XXXXXX XXXX</b>	Orders & Support	866 372-7442 support@primorigen.com
	<i>For Research Use Only Not intended for use in humans or animals</i>		Web	www.primorigen.com

<b>Pack Size</b>	10 µg
<b>Species</b>	Human
<b>Expression System</b>	HEK 293*
	Animal-derived product free
<b>Molecular Mass</b>	21 to 25 kDa, monomer, glycosylated
<b>Activity</b>	Typically 0.02 to 0.08 ng/mL
<b>Purity</b>	≥ 95%
<b>Endotoxin</b>	≤ 1 EU/µg

### Background:

Recombinant human G-CSF expressed in engineered human cells. G-CSF is a 21 to 25 kDa glycosylated monomer in the IL-6 superfamily. G-CSF induces the survival, proliferation, differentiation, and activation of neutrophilic granulocyte precursor cells and activates mature blood neutrophils and is the most potent of the colony-stimulating factors that induce terminal differentiation to granulocytes and macrophages in leukemic myeloid cell lines. G-CSF is an important signaling molecule in the maintenance of equilibrium of hematopoiesis, defense against infection, inflammation, and repair.

*Note: Representative data are shown below (not Lot-specific).*

### Formulation:

Lyophilized from a 0.2 micron filtered solution in PBS.

### Reconstitution:

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile PBS containing 0.1% endotoxin-free recombinant human serum albumin.

### Storage and Stability:

Lyophilized products are stable for one year at -20°C to -80°C from date of receipt. Store only at -20°C to -80°C in working aliquots. Avoid repeated freeze-thaw cycles.

### Quality Control Testing

#### Assay:

The specific activity was determined by the dose-dependent stimulation of the proliferation of murine M-NFS-60 cells (Mouse Myeloid Leukemia indicator cell line).

#### Purity Confirmation:

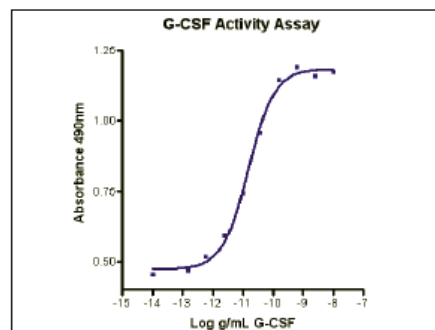
The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.

#### References:

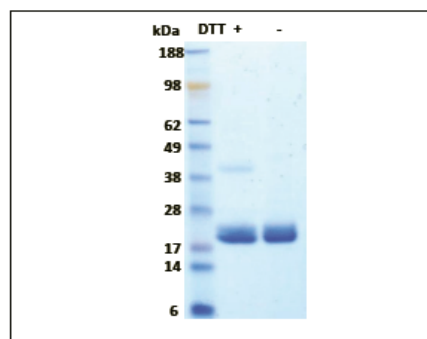
Shirafuji, N., *et al*, (1989) *Exp Hematol*. 17, 116-119  
Metcalf D., (2008) *Blood* 111, 485-491

*\*All HumanKine™ cytokines are expressed in HEK 293 cells. HumanKine™ is a trademark of HumanZyme Inc.*

## A. Activity Assay



## B. SDS-PAGE



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