



# Recombinant Human G-CSF

20150227BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>100-029</b>
Size:	10 µg
Lot. No.:	According to product label

## Scientific Background

<b>Gene-ID (NCBI):</b>	1440
<b>Synonyms:</b>	CSF3; GCSF; CSF3OS; C17orf33

G-CSF is a hematopoietic growth factor that stimulates the development of committed progenitor cells to neutrophils and enhances the functional activities of the mature end-cell. It is produced in response to specific stimulation by a variety of cells including macrophages, fibroblasts, endothelial cells and bone marrow stroma. G-CSF is being used clinically to facilitate hematopoietic recovery after bone marrow transplantation. Human and mouse G-CSF are cross-species reactive. Recombinant human G-CSF is an 18.7 kDa protein consisting of 174 amino acid residues.

## Sequence

```
TPLGPASSLP QSFLLKCLEQ VRKIQGDGAA LQEKLKATYK  
LCHPEELVLL GHSLGIPWAP LSSCPSQALQ LAGCLSQLHS  
GLFLYQGLLQ ALEGISPELG PTLDTLQLDV ADFATTIWQQ  
MEELGMAPAL QPTQGAMPAF ASAFQRRAGG VLVASHLQSF  
LEVSYRVLRH LAQP
```

## Database References

<b>Protein RefSeq:</b>	NP_000750.1
<b>Uniprot ID:</b>	P09919
<b>mRNA RefSeq:</b>	NM_000759

## Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 98% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng /µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	174
<b>MW:</b>	18.7 kDa

**Biological Activity:** The ED50 as determined by the dose-dependent stimulation of the proliferation of murine M-NFS-60 cells is  $\leq 0.1$  ng/ml, corresponding to a specific activity of  $\geq 1 \times 10^7$  units/mg.



**AVOID REPEATED FREEZE AND THAW CYCLES!**