



Recombinant rat G-CSF

20150227BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	R20-074
Size:	10 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	25610
Synonyms:	Granulocyte Colony-Stimulating Factor, CSF-3, MGI-1G, GM-CSFβ, pluripoietin

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. Recombinant rat G-CSF is a 21.6 kDa protein consisting of 196 amino acid residues.

Sequence

```
MKKIPLLTVS SLPPSLPLPR SFLKLSLEQV RKIQRNTEL  
LEQLCATYKL CHPEELVLFV HSLGIPKASL SSCSSQALQQ  
TKCLSQLHSG LFLYQGLLQA LAGISSELP TLDMLHLDVD  
NFATTIWQQM ESLGVAPTQV PTQSTMPIFT SAFQRRAGGV  
LVTSYLSQSF ETAAHHLHLL PRPAQKHFPE SLFISI
```

Database References

Protein RefSeq:	NP_058800.1
Uniprot ID:	P97712
mRNA RefSeq:	NM_017104.1

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	196
MW:	21.6 kDa

Biological Activity: Determined by its ability to stimulate the proliferation of mouse NFS-60 cells. The expected ED50 is ≤ 0.05 ng/ml, corresponding to a specific activity of $\geq 2 \times 10^7$ units/mg.



AVOID REPEATED FREEZE AND THAW CYCLES!