



# Recombinant Rat GM-CSF

20150227BB



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

<b>Cat.-no.:</b>	<b>R20-041</b>
Size:	10 µg
Lot. No.:	According to product label

### Sequence

MAPTRSPNPV TRPWKHVDI KEALSLNDM RALENEKNEK  
VDIISNEFSI QRPTCVQTRL KLYKQGLRGN LTKLNGALTM  
IASHYQTNCP PTPETDCEIE VTFEDFIKN LKGFLFDIPF DCWKPVQK

### Database References

<b>Protein RefSeq:</b>	NP_446304
<b>Uniprot ID:</b>	P48750
<b>mRNA RefSeq:</b>	NM_053852.1

## Scientific Background

<b>Gene-ID (NCBI):</b>	116630
<b>Synonyms:</b>	Csf2; Gmcsf; Gm-csf

GM-CSF is a hematopoietic growth factor that stimulates the development of neutrophils and macrophages and promotes the proliferation and development of early erythroid megakaryocytic and eosinophilic progenitor cells. It is produced in by endothelial cells, monocytes, fibroblasts and T-lymphocytes. GM-CSF inhibits neutrophil migration and enhances the functional activity of the mature end-cells. The human and murine molecules are species-specific and exhibit no cross-species reactivity. Recombinant rat GM-CSF is a 14.5 kDa globular protein consisting of 128 amino acids residues.

## 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>	128
<b>MW:</b>	14.5 kDa

**Biological Activity:** The ED50 was determined by the dose-dependent stimulation of the proliferation of Murine FDC-P1 cells is  $\leq 0.01$  ng/ml, corresponding to a specific activity of  $\geq 1.0 \times 10^8$  units/mg.



**AVOID REPEATED FREEZE AND THAW CYCLES!**