

**Animal-Free Recombinant Rat GM-CSF**  
**Catalog # PBG10558****Specification**

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**Animal-Free Recombinant Rat GM-CSF - Product Information****Animal-Free Recombinant Rat GM-CSF - Additional Information****Description**

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.

**BiologicalActivity**

The  $ED_{50}$  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.

**Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**Endotoxin**

Endotoxin level is  $<0.1$  ng/  $\mu$ g of protein ( $<1$ EU/  $\mu$ g).

**Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**Storage**

-20°C

**Precautions**

Animal-Free Recombinant Rat GM-CSF is for research use only and not for use in diagnostic or therapeutic procedures.

**Animal-Free Recombinant Rat GM-CSF - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

### **Animal-Free Recombinant Rat GM-CSF - Images**