



Recombinant Mouse GM-CSF

20221020DS



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

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|------------------|----------------------------|
| Cat.-no.: | M10-238 |
| Size: | 20 µg |
| Lot. No.: | According to product label |

Scientific Background

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|------------------------|--|
| Gene-ID (NCBI): | 12981 |
| Synonyms: | Granulocyte Macrophage Colony-Stimulating Factor, CSF-2, MGI-1GM, pluripoietin-alpha |

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 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 murine GM-CSF is a 14.2 kDa globular protein consisting of 125 amino acid residues.

Sequence

```
MAPTRSPITV TRPWKHVEAI KEALNLLDDM PVTLNEEVEV  
VSNEFSFKKL TCVQTRLKIF EQGLRGNFTK LKGALNMTAS  
YYQTYCPPTP ETDCEQTQVTT YADFIDSLKT FLTDIPFECK KPVQK
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Database References

| | |
|------------------------|-------------|
| Protein RefSeq: | NP_034099.2 |
| Uniprot ID: | P01587 |
| mRNA RefSeq: | NM_009969.4 |

Product Specifications

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|------------------------|------------------------------------|
| Expressed in | E. coli |
| Purity | > 98% by SDS-PAGE & HPLC analyses |
| Endotoxin level | < 0.1 ng /µg of protein (<1EU/µg). |
| Formulation | Lyophilized from 10mM Acetic Acid. |
| Length (aa): | 125 |
| MW: | 14.2 kDa |

Stability: The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 12 months at -20°C to -80°C.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in 10mM Acetic Acid to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2°C to 8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: The ED₅₀ as determined by the dose-dependent stimulation of the proliferation of murine FDC-P1 cells is ≤ 0.05 ng/ml, corresponding to a specific activity of ≥ 2 x 10⁷ units/mg.