



Recombinant Mouse Granulocyte Macrophage Colony-Stimulating Factor (GM-CSF)



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no:	M30-012
Size:	10 µg
Lot. No.:	According to product label
Country of origin:	Germany

Scientific Background

Gene:	<i>Csf2</i>
Synonyms:	Colony-stimulating factor, 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 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 124 amino acids residues.

References

1. Martinez-Moczygamba and Huston (2003) J. Allergy Clin Immunol 112:653
2. Barreda et al, (2004) Dev Comp Immunol 28:509
3. Eksioglu et al, (2007) Exp Hematol 35:1163
4. Cao Y, (2007) J Clin Invest 117:2362
5. Fleetwood et al, (2005) Crit Rev Immunol 25:405
6. Diederichs et al, (1991) Science 254:1779
7. Gough et al, (1984) Nature 309:763.

Sequence

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MAPTRSPITVTRPWKHVEAIKEALNLLDDMPVTLNEEVEVVSNEFSFKKLT  
VQTRLKIFEQGLRGNFTKLKALNMTASYQTYCPPTPETDCETQVTTYADF  
IDSLKTFLLTDIPFECKKPGQK
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Database References

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

Product Specifications

Expressed in	E.coli
Purity	> 98% by SDS-PAGE & silver stain
Buffer	30 mM Tris pH8
Endotoxin	< 0.1ng/µg of GM-CSF
Stabilizer	None
Formulation	lyophilized
Length (aa):	125
MW:	14.2 kDa
Result by N-terminal sequencing	MAPTRSPITV

Stability: The lyophilized mouse GM-CSF, though stable at room temperature, is best stored desiccated below 0°C. Reconstituted mouse GM-CSF should be stored in working aliquots at -20°C.

Reconstitution: The lyophilized mouse GM-CSF is soluble in water and most aqueous buffers. It can be reconstituted in water to a concentration of 100 µg/ml. This solution can be diluted into other buffered solutions or stored at -20°C for future use. For most in vitro applications, mouse GM-CSF exerts its biological activity in the concentration range of 0.05 to 0.5ng/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: No biological data available at the moment!



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Handling/Application

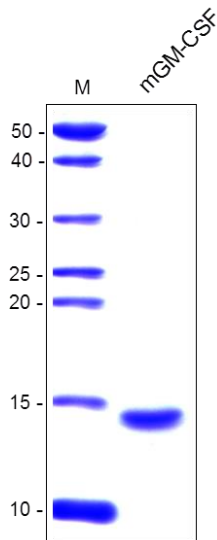


Fig. 1: SDS-PAGE analysis of recombinant mouse GM-CSF. Sample was loaded in 15% SDS-polyacrylamide gel under reducing condition and stained with Coomassie blue.