

GM-CSF Recombinant Protein

Product Specifications	
Catalog Number:	908-064
Source:	Recombinant murine GM-CSF produced in <i>E. coli</i> ; a single, non-glycosylated, polypeptide chain containing 125 amino acids
Biological Activity:	Fully biologically active when compared to World Health Organization (WHO) reference standard. The ED50 as determined by the dose-dependant stimulation of the proliferation of murine FDC-P1 cell line is < 0.2 ng/mL, corresponding to a Specific Activity of 1.1×10^7 IU/mg.
Amino Acid Composition:	Identical with the expected amino acid composition of native human GM-CSF. Sequence of the five N-terminal amino acids, Ala-Pro-Ala-Arg-Ser, conforms to the sequence of native human GM-CSF. N-terminal methionine removed enzymatically.
Molecular Weight:	~14 kDa observed
Purity:	>99.0% pure as determined by RP-HPLC, Anion-exchange FPLC, and reducing and non-reducing SDS-PAGE
Endotoxin:	<0.1 ng/μg (IEU/μg) of recombinant murine GM-CSF
Format:	2 μg sterile filtered liquid lyophilized after extensive dialysis against 10 mM acetic acid buffer; very soluble in water and most aqueous buffers. It is recommended to reconstitute this protein in sterile 20mM AcOH (acetic Acid) not less than 100 μg/ml.
Storage: <i>Shipping conditions may differ from the recommended storage temperature</i>	Stable lyophilized at room temperature; store desiccated below 0°C; store reconstituted at 4°C
Related Products:	
908-063	GM-CSF Recombinant Protein
905-129	G-CSF monoclonal Antibody

Background:

The cytokine Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) controls the production, differentiation, and function of granulocytes and macrophages¹. The active form of GM-CSF functions extracellularly as a homodimer. Localized to a cluster of related genes at chromosome region 5q31, data links this gene to interstitial deletions in the 5q- syndrome and acute myelogenous leukemia². Other genes in the cluster include those encoding interleukins 4, 5, and 13. GM-CSF stimulates the growth and differentiation of hematopoietic precursor cells from various lineages, including granulocytes, macrophages, eosinophils and erythrocytes.

References:

1. Hamilton, J. and Anderson, G.P. (2004) Growth Factors **22**, 225-231.
2. Boultonwood, J., et al. (1994) Blood **84**, 3253-3260.

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