

Recombinant Mouse GM-CSF Protein

Product Information

Product Name	Cat#	Size
Recombinant Mouse GM-CSF Protein	91108ES08	5 µg
	91108ES60	100 µg
	91108ES76	500 µg

Product Description

Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF) is a powerful growth and differentiation factor which acts on hematopoietic progenitor cells and also activates differentiated granulocytes and macrophages. The 22 kDa glycosylated GM-CSF, similar to IL-3 and IL-5, is a cytokine with a core of four bundled alpha -helices. Mature human GM-CSF shares 63%-70% amino acid sequence identity with canine, feline, porcine, and rat GM-CSF and 54% with mouse GM-CSF. GM-CSF has been and is still widely used as an adjuvant in clinical trials of vaccination with autologous tumor cells, peptides and/or dendritic cells in a variety of human neoplasms. The effects of GM-CSF on HIV-1 replication in primary monocytes and macrophages, and in related cell lines, have demonstrated augmentation of HIV-1 expression in vitro.

Product Properties

Synonyms	Granulocyte/Macrophage Colony-Stimulating Factor, GM-CSF, CSF-2, MGI-1GM, Pluripoietin- α
Accession	P01587
GeneID	12981
Source	E.coli-derived mouse GM-CSF protein, Ala18-Lys141.
Molecular Weight	Approximately 14.1 kDa.
AA Sequence	APTRSPITVT RPWKHVEAIK EALNLLDDMP VTLNEEVEVV SNEFSFKKLT CVQTRLKIFE QGLRGNFTKL KGALNMTASY YQTYCPPTPE TDCETQVTY ADFIDSLKTF LTDIPFECKK PGQK
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 98% by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ as determined by a cell proliferation assay using murine FDC-P1 cells is less than 0.05 ng/mL, corresponding to a specific activity of $> 2.0 \times 10^7$ IU/mg. Fully biologically active when compared to standard.
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20 °C for 1 year.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 °C under sterile conditions after reconstitution.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.