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Recombinant Murine Granulocyte Macrophage Colony Stimulating Factor (rmGM-CSF)

◀ **Description:**

Recombinant murine GM-CSF produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 125 amino acids and having a molecular mass of 14285.35 Dalton
rmGM-CSF is purified by proprietary chromatographic techniques.

◀ **Source:**

Escherichia Coli.

◀ **Lot Number:**

◀ **Quantity Shipped:**

◀ **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

◀ **Formulation:**

It is recommended to reconstitute the lyophilized rmGM-CSF in sterile 18MΩ-cm H₂O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.

◀ **Stability:**

Lyophilized rmGM-CSF although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rmGM-CSF should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

◀ **Stability:**

Lyophilized rmGM-CSF, although stable at room temperature, should be stored desiccated below 0°C. Reconstituted rmGM-CSF is best stored refrigerated at 4°C.

◀ **Purity:**

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Anion-exchange FPLC.
- (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

◀ **Amino acid sequence:**

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ala-Pro-Thr-Arg.

◀ **Dimers and aggregates:**

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

◀ **Biological Activity:**

rmGM-CSF is fully biologically active when compared to 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 5x10⁶ IU/mg.

◀ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of rmGM-CSF.

◀ **Protein content:**

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.765 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a calibrated solution of mGM-CSF as a Reference Standard.