

Granulocyte Macrophage-Colony Stimulating Factor Human Recombi-

Item Number	rAP-2141
Synonyms	CSF-2, MGI-1GM, GM-CSF, Pluripoietin-alpha, MGC131935, MGC138897.
Description	Granulocyte Macrophage Colony Stimulating Factor Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 127 amino acids and having a molecular mass of 14477 Dalton. GM-CSF is purified by proprietary chromatographic techniques.
Uniprot Accesion Number	P04141
Amino Acid Sequence	The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Pro-Ala-Arg-Ser.N-terminal methionine has been completely removed enzymatically.
Source	Escherichia Coli.
Physical Appearance and Stability	Sterile Filtered White lyophilized (freeze-dried) powder. Lyophilized Granulocyte Macrophage Colony Stimulating Factor although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GMCSF 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-
Formulation and Purity	GM-CSF was lyophilized after extensive dialysis against 2mM sodium phosphate buffer pH= 7.4±0.1. Greater than 98.0% as determined by:1. Analysis by RP-HPLC.2. Analysis by SDS-PAGE.
Application	
Solubility	It is recommended to reconstitute the lyophilized Granulocyte Macrophage Colony Stimulating Factor in sterile 18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
Biological Activity	The ED50 as determined by the dose-dependant stimulation of the proliferation of human TF-1 cells (human erythroleukemic indicator cell line) is < 0.1 ng/ml, corresponding to a Specific Activity of 11,100,000 IU/mg.
Shipping Format and Condition	Lyophilized powder at room temperature.

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users! This product is sold for **Research Use Only**