Recombinant Human GM-CSF (CSF2)

Cat No:HR2R1464

For research use only

Overview

Quantity	10 x 100 ?g (Z100277 x 10)
Gene Symbol	CSF2
Gene ID	1437
Accession	P04141
Alternative Name	GMCSF, Granulocyte-macrophage colony-stimulating factor, CSF-2, Molgramostin, Sargramostim, pluripoietin-alpha, Recombinant Human Granulocyte Macrophage Colony Stimulating Factor (CSF2)
Species	Human
Source	E. coli
Description	GM-CSF is a monomeric protein of 127 amino acids with two glycosylation sites. The protein is synthesized as a precursor of 144 amino acids, which included a hydrophobic secretory signal sequence at the amino terminal end. The sugar moiety is not required for the full spectrum of biological activities. Non-glycosylated and glycosylated GM-CSF show the same activities in vitro. Fully glycosylated GM-CSF is biologically more active in vivo than the non-glycosylated protein. This protein is secreted together with other factors by T cells and macrophages following cell activation by antigens or mitogens. Approximately 90% of the secreted colony stimulating activities are due to GM-CSF.
Functions	The ED(50) as determined by the dose-dependent stimulation of the proliferation of human TF-1 cells is ? 0.1 ng/mL, corresponding to a specific activity of ? 1.0 x 10^7 units/mg.
Formulation	Human GM-CSF was lyophilized from a 0.2 ?m filtered solution in PBS, pH 7.0.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	15
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature
Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.