Recombinant Human GM-CSF (CSF2)

Cat No:HR2R1465

For research use only

Overview

Quantity	100 ?g
Gene Symbol	CSF2
Gene ID	1437
Accession	P04141
Alternative Name	GM-CSF, Granulocyte-macrophage colony-stimulating factor, CSF-2, Pluripoietin-alpha, Recombinant Human Granulocyte Macrophage Colony Stimulating Factor (CSF2)
Species	Human
Source	E. coli
Description	GM-CSF is a hematopoietic growth factor that is produced by endothelial cells, monocytes, fibroblasts and T-lymphocytes following their activation by antigens or mitogens. GM-CSF stimulates the development of macrophages and neutrophils and plays a role in the proliferation and development of early erythroid megakaryocytic and eosinophilic progenitor cells. Approximately 90% of the secreted colony stimulating activities are due to GM-CSF. While non-glycosylated and glycosylated GM-CSF show similar activities in vitro, fully glycosylated GM-CSF is biologically more active in vivo compared to its non-glycosylated counterpart. Human and murine GM-CSF are species-specific and therefore, exhibit no cross-reactivity. Recombinant Human GM-CSF is a non-glycosylated, monomeric protein that contains intra-chain disulfide bonds.
Functions	The ED50 as determined by the dose-dependent stimulation of the proliferation of human TF-1 cells was found to be ? 0.5 ng/mL
Formulation	Lyophilized from a 0.2 ?m filtered solution in Tris and NaCl
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.