

Granulocyte Macrophage-Colony Stimulating Factor, His Tag, human recombinant (rHuGM-CSF-His)

Catalog No: 95009 Lot No: XXXXX Source: *E. coli*

Synonyms: CSF-2, MGI-1GM, GM-CSF, Pluripoietin-alpha, Molgramostin, Sargramostim, MGC131935, MGC138897

Background

GMCSF is a cytokine that controls the production, differentiation, and function of granulocytes and macrophages. The active form of the protein is found extracellularly as a homodimer. This gene has been localized to a cluster of related genes at chromosome region 5q31, which is known to be associated with interstitial deletions in the 5q- syndrome and acute myelogenous leukemia. Other genes in the cluster include those encoding interleukins 4, 5, and 13. GM-CSF stimulates the growth and differentiation of hematopoietic precursor cells from various lineages, including granulocytes, macrophages, eosinophils and erythrocytes. Granulocyte Macrophage Colony Stimulating Factor is a potent species-specific growth factor produced by a variety of cell types including T cells, B cells, macrophages, mast cells and endothelial cells. GM-CSF is produced in response to cytokine or immune stimulation and has been shown to stimulate the proliferation, maturation and function of hematopoietic cells.

Description

GM-CSF human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 127 amino acids (18-144) and having a molecular mass of 18.98 kDa with an N-terminal hexahistidine tag. GM-CSF His is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered clear solution.

Formulation

Granulocyte Macrophage Colony Stimulating Factor-His is supplied in 20 mM Tris HCl (pH 8) and 50% glycerol at a concentration of 0.325 mg/ml.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer periods of time. Please avoid freeze thaw cycles.

Purity

Greater than 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.