

## Overview

<b>Synonyms</b>	Granulocyte Macrophage Colony Stimulating Factor, CSF-2, MGI-1GM, GM-CSF, Pluripoietin-alpha, Molgramostin, Sargramostim, MGC131935, MGC138897
<b>Description</b>	Human Granulocyte Macrophage Colony Stimulating Factor (hGM-CSF), a hematopoietic growth factor, is mainly involved in granulopoiesis and monocytopenia. It is produced by T-cells and macrophages in response to antigens, and by endothelial cells and fibroblasts following induction of various cytokines <sup>[1]</sup> . A monomeric protein of 127 amino acids with six glycosylation sites and two intra disulfide bonds <sup>[2,3]</sup> , glycosylated and non-glycosylated hGM-CSFs show similar biological activities <sup>[4]</sup> . Other than its connection to the growth and development of granulocytes and macrophages, it is also indispensable for the proliferation of erythroid and megakaryocytic cells <sup>[5]</sup> .
<b>Species Source</b>	Human <i>P. pastoris</i>
<b>Biological Activity</b>	ED <sub>50</sub> < 0.1 ng/ml, measured by proliferation assay of TF-1 cells, corresponding to a specific activity of > 1.0x 10 <sup>7</sup> units/mg.
<b>Sequence</b>	MAPARSPSPS TQPWEHVNAI QEARRLLNLS RDAAEMNET VEVISEMFDL QEPTCLQTRL ELYKQGLRGS LTKLKGPLTM MASHYKQHCP PTPETSCATQ IITFESFKEN LKDFLLVIPF DCWEPVQE

## Properties

<b>Measured Molecular Weight</b>	26-32 kDa, observed by SDS-PAGE.
<b>Purity</b>	> 95 % as analyzed by SDS-PAGE.
<b>Formulation</b>	Lyophilized after extensive dialysis against 10 mM PB, pH7.0.
<b>Reconstitution</b>	Reconstituted in ddH <sub>2</sub> O at 100 µg/ml.
<b>Endotoxin Level</b>	<1.0 EU/µg, determined by LAL method.
<b>Storage</b>	Lyophilized recombinant <b>human Granulocyte Macrophage Colony Stimulating Factor (rhGM-CSF)</b> remains stable up to 12 months at lower than -70°C from date of receipt. Upon reconstitution, rhGM-CSF should be stable up to 4 weeks at 4°C or up to 6 months at -20°C.

India Contact:

**Life Technologies (India) Pvt. Ltd.**

306, Aggarwal City Mall, Opposite M2K Pitampura,  
Delhi – 110034 (INDIA).

Mobile: +91-9810521400, Ph: +91-11-42208000

Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com)

Web: [www.lifetechindia.com](http://www.lifetechindia.com)