

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant GM-CSF (Sargramostim), Human (P. pastoris-expressed)

Catalog Number: BK0341-50µg

Source: P. pastoris

Quantity: 50µg

### Description:

Human Granulocyte Macrophage Colony Stimulating Factor (hGM-CSF), a hematopoietic growth factor, is mainly involved in granulopoiesis and monocytopoiesis. It is produced by T-cells and macrophages in response to antigens, and by endothelial cells and fibroblasts following induction of various cytokines [1]. A monomeric protein of 127 amino acids with six glycosylation sites and two intra disulfide bonds [2,3], glycosylated and non-glycosylated hGM-CSFs show similar biological activities [4]. 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 [5]. Recombinant Human Granulocyte Macrophage Colony Stimulating Factor (rhGM-CSF) produced in P. pastoris is a glycosylated polypeptide. A fully biologically active molecule, rhGM-CSF has a molecular mass of 26-32kDa analyzed by SDS-PAGE and is obtained by proprietary refolding and chromatographic techniques at GenScript.

### Molecular Weight:

26-32kDa, observed by SDS-PAGE.

### Purity:

> 95 % as analyzed by SDS-PAGE.

### Biological Activity:

ED50 < 0.2ng/ml, measured by proliferation assay of TF-1 cells, corresponding to a specific activity of > 5x 10<sup>6</sup> units/mg.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against 10 mM PB, pH7.0.

### AA Sequence:

MAPARSPSPSTQPWEHVNAIQEALRLLNLSRD-TAAEMNETVEVISEMFDLQEPTCLQTRLE-LYKQGLRGLTKLKGPLTMMASHYK-QHCPPTPETSCATQIIT-FESFKENLKD FLLVIPFDCWEPVQE

### Endotoxin:

<1.0EU/µg, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O at 100 µg/ml.

### Storage:

Lyophilized recombinant human Granulocyte Macrophage Colony Stimulating Factor (rhGM-CSF) remains stable up to 12 months at -80 °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.

### Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.