

PRODUCT DATA SHEET



Bioworld Technology, Inc.

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

Catalog Number: BK0342-1mg

Source: P. pastoris

Quantity: 1mg

Description:

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 [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 26-32 kDa analyzed by SDS-PAGE and is obtained by proprietary refolding and chromatographic techniques at GenScript.

Molecular Weight:

26-32 kDa, observed by SDS-PAGE.

Purity:

> 95 % as analyzed by SDS-PAGE.

Biological Activity:

ED50 < 0.1 ng/ml, measured by proliferation assay of TF-1 cells, corresponding to a specific activity of > 1.0 x 10⁷ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against 10 mM PB, pH 7.0.

AA Sequence:

MAPARSPSPSTQPWEHVNAIQEARRLLNLSRD-TAAEMNETVEVISEMFDLQEPTCLQTRLE-LYKQGLRGLTKLKGPLTMMASHYK-QHCPPTPETS CATQIIT-FESFKENLKD FLLVIPFDCWEPVQE

Endotoxin:

< 1.0 EU/μg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O 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:

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