

**DATASHEET**  
Version 20181206**GM-CSF, Human(CHO-expressed)****Cat. No.:** Z02983-1**Size:** 1.0 mg**Synonyms:** Granulocyte/Macrophage Colony-Stimulating Factor, CSF-2, MGI-1GM, pluripoietin- $\alpha$ **Description:**

Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) was initially characterized as a growth factor that can support the in vitro colony formation of granulocyte-macrophage progenitors. Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) is produced by a number of different cell types, including activated T cells, B cells, macrophages, mast cells, endothelial cells, and fibroblasts, in response to cytokine of immune and inflammatory stimuli. Besides granulocyte-macrophage progenitors, Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) is a growth factor for erythroid, megakaryocyte, and eosinophil progenitors. On mature hematopoietic cells, GM-CSF is a survival factor for and activates the effectors functions of granulocytes, monocytes/macrophages and eosinophils. Human Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) can induce human endothelial cells to migrate and proliferate. Additionally, Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) can stimulate the proliferation of a number of tumor cell lines, including osteogenic sarcoma, carcinoma, and adenocarcinoma cell lines.

**Amino Acid Sequence:**

00001 APARSPSPST QPWEHVNAIQ EARRLLNLSR DTAEMNETV  
00041 EWISEMFDLQ EPTCLQTRLE LYKQGLRGSL TKLKGPLTMM  
00081 ASHYKQHCPP TPETSCATQI ITFESFKENL KDFLLVIPFD  
00121 CWEPVQE

**Source:** CHO**Species:** Human**Biological Activity:** ED<sub>50</sub> < 0.2 ng/ml, measured in a cell proliferation assay using TF-1 cells, corresponding to a specific activity of > 5×10<sup>6</sup> units/mg.**Molecular Weight:** 22-28 kDa, observed by non-reducing SDS-PAGE.**Formulation:** Lyophilized after extensive dialysis against PBS.**Reconstitution:** Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.**Purity:** > 95% as analyzed by SDS-PAGE and HPLC.**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.**Storage:** Lyophilized recombinant human Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhGM-CSF should be stable up to 1 week at 4°C or up to 2 months at -20°C.