

DATASHEET Version 20181206

## GM-CSF, RhesusMacaque

Cat. No.: Z02761-1

**Size**: 1.0 mg

**Synonyms**: Granulocyte Macrophage Colony Stimulating Factor (GM-CSF), Rhesus Macaque;

## **Description:**

GM-CSF was initially characterized as a growth factor that can support the in vitro colony formation of granulocyte-macrophage progenitors. It 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 or immune and inflammatory stimuli. Besides granulocyte-macrophage progenitors, GM-CSF is also a growth factor for erythroid, megakaryocyte and eosinophil progenitors. On mature hematopoietic cells, GM-CSF is a survival factor for and activates the effector functions of granulocytes, monocytes/macrophages and eosinophils.

## Amino Acid Sequence:

00001 APARSPSPGT QPWEHVNAIQ EARRLINLSR DTAAEMNKTV 00041 EVVSEMFDLQ EPSCLQTRLE LYKQGLQGSL TKLKGPLTMM 00081 ASHYKQHCPP TPETSCATQI ITFQSFKENL KDFLLVIPFD 00121 CWEPVQE Source: E. coli

**Species**: RhesusMacaque

**Biological Activity**: Fully biologically active when compared to standard. The  $ED_{50}$  as determined by a cell proliferation assay using human TF-1 cells is less than 0.1 ng/ml, corresponding to a specific activity of > 1.0 × 10<sup>7</sup> IU/mg.

**Molecular Weight**: Approximately 14.4 kDa, a single non-glycosylated polypeptide chain containing 127 amino acids.

**Formulation**: Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

**Appearance**: Sterile Filtered White lyophilized (freeze-dried) powder.

**Reconstitution**: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at  $\leq$  -20 °C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 98 % by SDS-PAGE and HPLC analyses.

**Endotoxin Level**: Less than  $1 \text{ EU}/\mu \text{g}$  of rRhGM-CSF as determined by LAL method.

**Storage**: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.

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