

BACKGROUND:

BACKGROUND Granulocyte Macrophage Colony Stimulating Factor, GM-CSF, is hematopoietic factor produced by endothelial cells, monocytes, fibroblasts and T cells in response to a number of inflammatory mediators. GM-CSF is able to stimulate the production of neutrophilic granulocytes, macrophages, and mixed granulocyte-macrophage colonies from bone marrow cells. GM-CSF can also stimulate some functional activities in mature granulocytes and macrophages. Human and mouse GM-CSF show no cross-reactivity.

Recombinant human GM-CSF is a non-glycosylated protein containing 127 amino acids and having a molecular mass of 14.5 kDa.

Cat. No.:
RP1008AF

Alternate Names:
CSF-2. Pluripoietin- α , MGI1GM

AA Sequence:

MAPARSPSPS	TQPWEHVNAI	QEARRLLNLS
RDAAEMNET	VEVISEMFDL	QEPTCLQTRL
ELYKQGLRGS	LTKLKGPLTM	MASHYKQHCP
PTPETSCATQ	IITFESFKEN	LKDFLLVIPF
DCWEPVQE		

TECHNICAL INFO

Source:
E. coli

Physical Appearance:
Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
10 mM sodium phosphate, pH 7.5

Stability:
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:
Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:
The activity is measured by dose-dependent T11 cell proliferation, with Bioactivity Acceptance Criteria ED50 at 200 ng/mL

Animal Component-Free
This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

