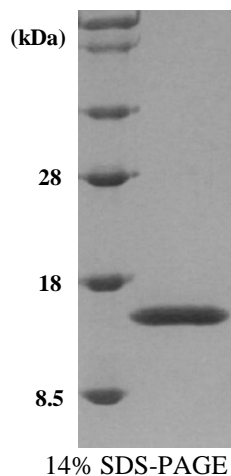


**Product:** Granulocyte Macrophage-Colony Stimulating Factor, GM-CSF  
Human Recombinant  
**Catalog #:** 01-2238  
**Amount:** 50 µg

**SOURCE:** Recombinant, E. coli  
**DESCRIPTION:** Human GM-CSF is a 14.6 kDa globular protein consisting of 128 amino acid containing two disulfide bonds. GM-CSF is a hematopoietic growth factor that stimulates the development of neutrophils and macrophages and promotes the proliferation and development of early erythroid megakaryocytic and eosinophilic progenitor cells. It is produced in by endothelial cells, monocytes, fibroblasts and T-lymphocytes. GM-CSF inhibits neutrophil migration and enhances the functional activity of the mature end-cells. Recombinant human GM-CSF was expressed in E.coli and purified by conventional chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.

**AA Sequence:**

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



**PURITY:** ≥ 95% by SDS PAGE  
**MOLECULAR WEIGHT:** 14.6 kDa (128 amino acids)  
**PRESENTATION:** Purified, Phosphate-Buffered Saline (PBS), pH7.4  
**STORAGE/STABILITY:** -20°C (aliquot), Avoid repeated freeze and thaw cycles.

**Reference:**

Trapnell BC, et al. (2002) Annu Rev Physiol. 64, 775-802  
Wong GG, et al (1985) Science, 228, 810-815

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