

## 32-12096: Human Granulocyte Macrophage-Colony Stimulating Factor

**Gene :** CSF2  
**Gene ID :** 1437  
**Uniprot ID :** P04141  
**Alternative Name :** Colony-stimulating factor, Molgramostin, Sargramostim, GMCSF

### Description

**Source:** Genetically modified E.coli.

**Predicted MW:** Monomer, 14.6 kDa (128 aa)

Granulocyte-macrophage colony-stimulating factor (GM-CSF) is hematopoietic growth factor produced by endothelial cells, monocytes, fibroblasts, and T cells. GM-CSF stimulates the production of neutrophilic granulocytes, macrophages, and mixed granulocyte-macrophage colonies from bone marrow cells. GM-CSF promotes immune system development and regulates neutrophil function during infection. Human and mouse GM-CSF show no cross-reactivity.

### Product Info

**Amount :** 20 µg / 100 µg  
**Purification :** Reducing and Non-Reducing SDS PAGE at >= 95%  
**Content :** Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, pH 7.5  
Sterile water at 0.1 mg/mL  
**Storage condition :** Store at -20°C  
**Amino Acid :** MAPARSPSPS TQPWEHVNAI QEARRLLNLS RDTAAEMNET VEVISEMFDL QEPTCLQTRL ELYKQGLRGS LTKLKGPLTM MASHYKQHCP PTPETSCATQ IIFESFKEN LKDFLLVIPF DCWEPVQE

### Application Note

**Endotoxin:** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

Biological Activity was determined by TF-1 cell proliferation at <=200 pg/mL; >= 5.0 x 10<sup>6</sup> units/mg (typical ED50 is 50-150 pg/mL). Centrifuge vial before opening, Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vial to compensate for this loss.



