

## 32-6381: GMCSF Porcine

**Application :** Functional Assay

**Alternative Name :** CSF-2, MGI-1GM, GM-CSF, Pluripoietin-alpha, Molgramostin, Sargramostim.

### Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

GMCSF is a cytokine that controls the production, differentiation, and function of granulocytes and macrophages. The active form of GMCSF is found extracellularly as a homodimer. GMCSF has been localized to a cluster of related genes at chromosome region 5q31, which is known to be associated with interstitial deletions in the 5q- syndrome and acute myelogenous leukemia. Other genes in the cluster include those encoding interleukins 4, 5, and 13. GM-CSF stimulates the growth and differentiation of hematopoietic precursor cells from various lineages, including granulocytes, macrophages, eosinophils and erythrocytes.

Granulocyte Macrophage-Colony Stimulating Factor Porcine Recombinant produced in E. coli is a non-glycosylated monomer chain containing 128 amino acids and having a molecular mass of 14.5kDa. GMCSF is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 50 µg / 100 µg

**Purification :** Greater than 95.0% as determined by SDS-PAGE.

**Content :** The protein was lyophilized from a sterile (0.2µm) filtered solution containing 10mM sodium phosphate, pH 7.5.

It is recommended to reconstitute the lyophilized GMCSF in sterile 18M Omega -cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Storage condition :** Lyophilized GMCSF although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GMCSF should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

**Amino Acid :** MAPTRPPSPV TRPWQHVD AI KEALSLLNNS NDTAAVMNET VDVVCEMFDP QEPTCVQTRL  
NLYKQGLRGS LTRLKSPLTL LAKHYEQHCP LTEETSCETQ SITFKSFKDS LNKFLFTIPF DCWGPVKK.

### Application Note

The ED50, as determined by TF-1 cell proliferation is 4.52ng/ml corresponding to a specific activity which is  $2.2 \times 10^5$  units/mg.