

CSF2

Recombinant Human GM-CSF/CSF2 (aa 18-144)

Catalog No.	CSI15654A CSI15654B	Quantity:	100 µg 500 µg
Alternate Names:	GMCSF, MGC131935, MGC138897, granulocyte-macrophage colony-stimulating factor, CSF, molgramostin, sargramostim, colony-stimulating factor, granulocyte-macrophage colony stimulating factor		
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 <i>E.coli</i> and purified by conventional chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.		
Concentration:	1 mg/ml (determined by Bradford assay)		
GeneID:	1437		
Protein Accession No:	NP_000749		
Source:	<i>E. coli</i>		
Molecular Weight:	14.6 kDa (128 aa), confirmed by MALDI-TOF.		
Formulation:	Liquid. In phosphate-buffered saline (PBS), pH 7.4		
Purity:	> 95% by SDS - PAGE		
Endotoxin Level:	< 1.0 EU per 1 microgram of protein (determined by LAL method)		
Biological Activity:	The ED ₅₀ for this effect is < 0.18 ng/ml. Measured in a cell proliferation assay using TF1 human erythroleukemic cells.		
Amino Acid Sequence:	MAPARSPSPS TQPWEHVNAI QEARRLLNLS RDTAAEMNET VEVISEMFDL QEPTCLQTRL ELYKQGLRGS LTKLKGPLTM MASHYKQHCP PTPETSCATQ IITFESFKEN LKDFLLVIPF DCWEPVQE		
Application:	SDS-PAGE		

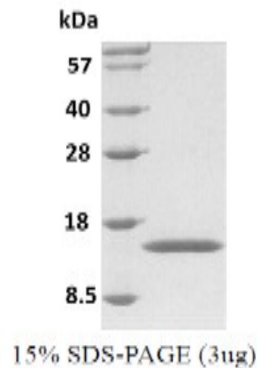


Storage & Stability:

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -80°C. **Avoid repeated freezing and thawing cycles.**

Activity Assay:

Cell line: TF1 (human erythroleukemic cell)
Maintenance Condition: 10% FBS RPMI 1640 with GM-CSF
Assay medium: 10% FBS RPMI 1640 without Gm-CSF
Cell density: 2 x 10,000 cells/well (96 well plate, final volume 100 ul)
Starvation: 24hr, Assay medium
Incubation time: 24 hr (after sample treatment)
Concentration range: 0.048 ng/ml - 25 ng/ml
Detection method: MTT assay



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

