



Recombinant Protein Technical Manual

Recombinant Human GM-CSF/CSF2 Protein (P. pastoris)(Active)
RPES5183

Product Data:

Product SKU: RPES5183

Size: 10µg

Species: Human

Expression host: P. pastoris

Uniprot: P04141

Protein Information:

Molecular Mass: 14.4 kDa

AP Molecular Mass: 24-35 kDa

Tag:

Bio-activity: Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 6-30pg/ml.

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 10mM TrisHCl, 4% Mannitol, 1% Sucrose, pH 8.5.

Reconstitution: Please refer to the printed manual for detailed information.

Application: Cell Culture

Synonyms: Granulocyte-Macrophage Colony-Stimulating Factor; GM-CSF; Colony-Stimulating Factor; CSF; Molgramostin; Sargramostim; CSF2; GMCSF

Immunogen Information:

Sequence: Ala18-Glu144

Background:

GM-CSF was initially characterized as a growth factor that can support the in vitro colony formation of granulocyte macrophage progenitors. It is produced by a number of different cell types (including activated T cells, B cells, macrophages, mast cells, endothelial cells and fibroblasts) in response to cytokine of immune and inflammatory stimuli. Besides granulocyte-macrophage progenitors, GM-CSF is also a growth factor for erythroid, megakaryocyte and eosinophil progenitors. On mature hematopoietic, monocytes/macrophages, and eosinophils, GM-CSF has also been reported to have a functional role on non-hematopoietic cells. It can induce human endothelial cells to migrate and proliferate. Additionally, GM-CSF can also stimulate the proliferation of a number of tumor cell lines, including osteogenic sarcoma, carcinoma and adenocarcinoma cell lines.