Datasheet for ABIN1096770

GM-CSF Protein (AA 18-144)

Go to Product page

Overview

Quantity:	50 µg
Target:	GM-CSF (CSF2)
Protein Characteristics:	AA 18-144
Origin:	Human
Source:	Yeast (Pichia pastoris)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Functional Studies (Func)

Product Details

Purpose:	Recombinant Human GM-CSF/CSF2 (P. pastoris)
Sequence:	APARSPSPST QPWEHVNAIQ EARRLLNLSR DTAAEMNETV EVISEMFDLQ EPTCLQTRLE LYKQGLRGSL TKLKGPLTMM ASHYKQHCPP TPETSCATQI ITFESFKENL KDFLLVIPFD CWEPVQE
Characteristics:	Recombinant Human Granulocyte-Macrophage Colony-Stimulating Factor/GM-CSF is produced with our Pichia pastoris expression system. The target protein is expressed with sequence (Ala18-Glu144) of Human GM-CSF.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Sterility:	0.2 µm filtered
Endotoxin Level:	Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test

Target Details

Target:	GM-CSF (CSF2)
Alternative Name:	GM-CSF (CSF2 Products)
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-hematopoitic 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. Alternative Names: Granulocyte-Macrophage Colony-Stimulating Factor, GM-CSF, Colony-Stimulating Factor, CSF, Molgramostin, Sargramostim, CSF2, GMCSF
Molecular Weight:	14.4 kDa
UniProt:	P04141
Pathways:	JAK-STAT Signaling, Cellular Response to Molecule of Bacterial Origin

Application Details

Comment:	Biological activity: ED50 is less than 0.2 ng/ml as determined by the dose-dependent stimulation of the proliferation of human TF-1 cells.Specific Activity of 5.0 x 106 IU/ mg.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	It is not recommended to reconstitute to a concentration less than 100 µg/mL. Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Buffer:	Lyophilized from a 0.2 µm filtered solution of 10 mM TrisHCl, 4 % Mannitol, 1 % Sucrose, pH 8.5.
Handling Advice:	Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

Handling

Storage:	4 °C/-20 °C/-80 °C
Storage Comment:	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Expiry Date:	3 months