

Recombinant Human GM-CSF/CSF2 Protein (His Tag, Cells)

Catalog Number: PKSH032502

Note: Centrifuge before opening to ensure complete recovery of vial contents.

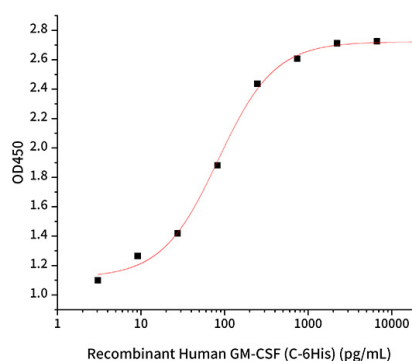
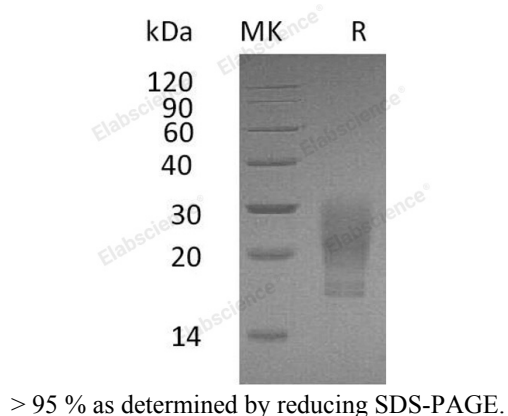
Description

Species	Human
Source	HEK293 Cells-derived Human GM-CSF;CSF2 protein Ala18-Glu144, with an C-terminal His
Calculated MW	15.5 kDa
Observed MW	17-30 kDa
Accession	P04141
Bio-activity	Measured in a cell proliferation assay using TF- 1 human erythroleukemic cells. The ED ₅₀ for this effect is 20-100 pg/mL.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.01 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 20mM PB, 150mM NaCl, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual.
	Please refer to the printed manual for detailed information.

Data



Measured in a cell proliferation assay using TF- 1 human erythroleukemic cells. The ED₅₀ for this effect is 20-100 pg/mL.

Background

Granulocyte-Macrophage Colony Stimulating Factor (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 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.