Recombinant Human GM-CSF/CSF2 Protein (E.coli)

Catalog Number: PKSH033662

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

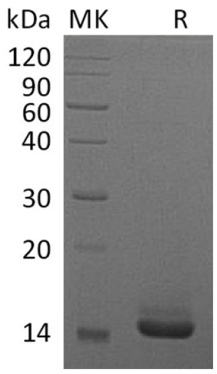
Description

Species	Human
Source	E.coli-derived Human GM-CSF;CSF2 protein Ala18-Glu144, with an N-terminal His
Mol_Mass	15.4 kDa
Accession	P04141
Bio-activity	Measure by its ability to induce TF-1 cells proliferation. The ED_{50} for this effect is <80 pg/mL. The specific activity of recombinant human GM-CSF is approximately >1 x 10^7 IU/mg.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS,pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



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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-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.