Datasheet for ABIN6699895

GM-CSF Protein

1 Image

Go to Product page

Overview

Quantity:	100 µg
Target:	GM-CSF (CSF2)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	GM-CSF Human Recombinant Protein
Purification:	Recombinant protein corresponding to amino acids 18 to 144 of mature human GM-CSF with addition of methionine on the N-terminus. Purity is greater than 98% as determined by reducing and non-reducing SDS-PAGE and by analytical RP-HPLC, each against a known standard.
Purity:	98,00%
Endotoxin Level:	Measured by LAL is < 0.01 ng/µg or < 0.1 EU/µg protein.
Biological Activity Comment:	Human GM-CSF is fully biologically active when compared to standard. The ED50, as determined by the dose-dependent induction of human TF-1 cell proliferation, is 0.094 ng/ml.

Target Details

Target:	GM-CSF (CSF2)
Alternative Name:	CSF2 (CSF2 Products)
Background:	Synonyms: Granulocyte Macrophage Colony Stimulating Factor, Granulocyte Macrophage-CSF,

Target Details

	Granulocyte-macrophage colony-stimulating factor, GM-CSF cytokine, Colony-stimulating factor, CSF, CSF2, Sargramostim, Molgramostin Background: Granulocyte Macrophage Colony Stimulating Factor is produced in response to a number of inflammatory mediators by mesenchymal cells present in the hemopoietic environment and at peripheral sites of inflammation. Granulocyte Macrophage-CSF is able to stimulate the production of neutrophilic granulocytes, macrophages, and mixed granulocyte-macrophage colonies from bone marrow cells and can stimulate the formation of eosinophil colonies from fetal liver progenitor cells. GM-CSF can also stimulate some functional activities in mature granulocytes and macrophages. GM-CSF receptors shows significant homologies with other receptors for hematopoietic growth factors , including IL2-beta, IL-3 , IL -6 , IL-7 , EPO and the Prolactin receptors. Recombinant Human Granulocyte Macrophage CSF produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 127 amino acids and having a molecular weight of 14.5 kDa.
UniProt:	P04141
Pathways:	JAK-STAT Signaling, Cellular Response to Molecule of Bacterial Origin

Application Details

Application Notes:	Application Note: GM-CSF protein has been tested by SDS-PAGE and is suitable as a control for polyclonal or monoclonal anti-GM-CSF in immunological assays. Other: User Optimized
Restrictions:	For Research Use only

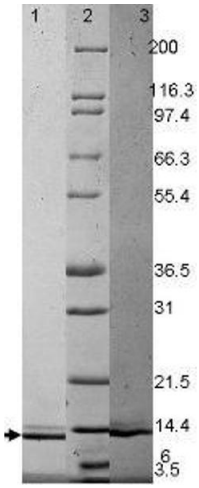
Handling

Format:	Lyophilized
Reconstitution:	Reconstitution_Buffer: Restore with deionized water (or equivalent) Reconstitution_Volume: 100 µL
Concentration:	1 mg/mL
Buffer:	Buffer: 0.01 M Sodium Phosphate, pH 7.5 Stabilizer: None
Preservative:	Without preservative
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This

Handling

	product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL) . For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiry Date:	6 months

Images



SDS-PAGE

Image 1. GM-CSF Human Recombinant Protein - SDS-PAGE. SDS-PAGE using recombinant human GM-CSF protein shows bands corresponding to GM-CSF (1µg) in lanes 1 (as unreduced protein) and lane 3 (as reduced protein, see arrowhead). Molecular weight estimation was made by comparison to prestained MW markers in lane 2 (Invitrogen Mark 12).