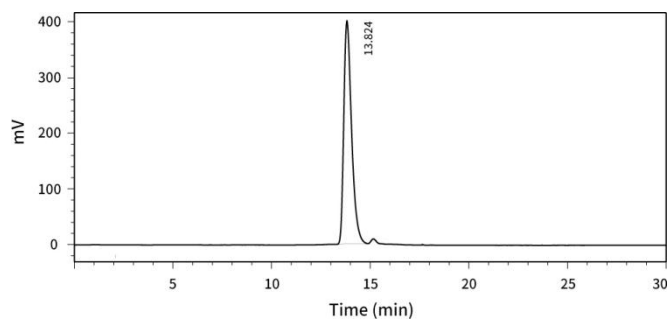


Recombinant Human GM-CSF

Catalog#:P00036 Derived from *E.coli*

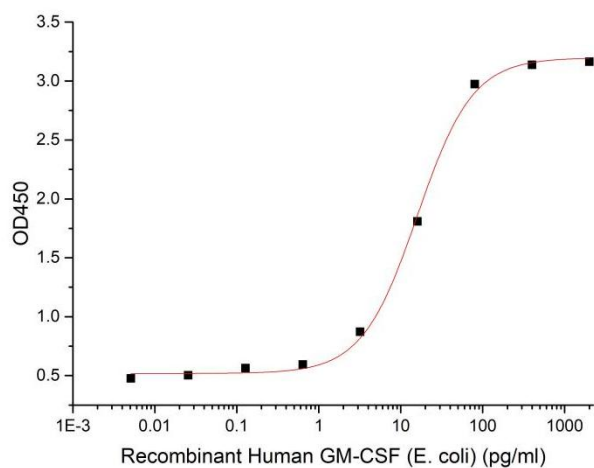
DESCRIPTION	<p>Recombinant Human Granulocyte-Macrophage Colony-Stimulating Factor is produced by our E.coli expression system and the target gene encoding Ala18-Glu144 is expressed.</p> <p>Accession#: P04141</p> <p>Known as: Granulocyte-Macrophage Colony-Stimulating Factor; GM-CSF; Colony-Stimulating Factor; CSF; Molgramostin; Sargramostim; CSF2; GMCSF</p>
FORMULATION	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
SHIPPING	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
STORAGE	<p>Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt.</p> <p>Reconstituted protein solution can be stored at 2-8°C for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.</p>
RECONSTITUTION	<p><i>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</i></p> <p><i>It is not recommended to reconstitute to a concentration less than 100µg/ml.</i></p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
QUALITY CONTROL	<p>Mol Mass: 14.6 KDa AP Mol Mass: 13-17 KDa, reducing conditions.</p> <p>Purity: Greater than 95% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: < 0.01 EU/µg as determined by LAL test.</p>
BACKGROUND	<p>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.</p>
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;">SDS-PAGE</div>  </div>	

Purity-SEC-HPLC:



Greater than 95% as determined by SEC-HPLC.

Bioactivity-Cell Based Assay:



Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 4-20 pg/ml.