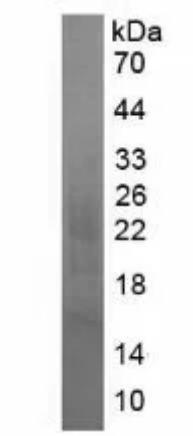
Active Colony Stimulating Factor 2, Granulocyte Macrophage (GM-CSF)

Catalog#:PHH12066

概述（Summary）

别称（Alternative Names）	CSF2; GMCSF; Sargramostim; Molgramostin; Granulocyte-Macrophage Colony Stimulating Factor
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ala18-Glu144】
Accession #	P04141
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	16.1 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Cytokine that stimulates the growth and differentiation of hematopoietic precursor cells from various lineages, including granulocytes, macrophages, eosinophils and erythrocytes.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

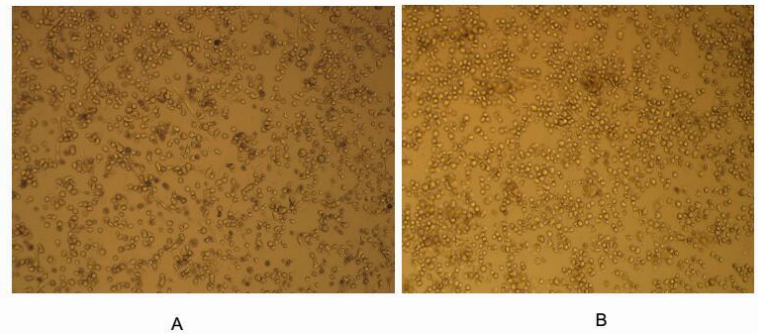


Figure 2. Effect of GM-CSF on U937 cells.

(A) U937 cells cultured in RPMI 1640, stimulated with GM-CSF (10ng/mL);

(B) Unstimulated U937 cells cultured in RPMI 1640.

TF-1, the human erythroleukemia cell line,provides a good system for detecting the activity of GM-CSF for it is a cell line of immature erythroid origin that completely depends on interleukin 3 (IL-3) or granulocyte-macrophage colony-stimulating factor (GM-CSF) for long term growth. As reported, GM-CSF was also able to induce differentiation of human monoblastic leukemia cell line U937. In house data was obtained by the following experiment: TF-1 cells and U937 cells were incubated in the presence of various concentrations of rhGM-CSF, then cells were observed by inverted microscope everyday .
Cell proliferation of TF1 cells after incubation with GM-CSF (10ng/mL) for 3 days was shown in Figure 1.The ED50 is 0.74ng/ml. Cell differentiation of U937 cells after incubation with GM-CSF (10ng/mL) for 5 days was shown in Figure 2.

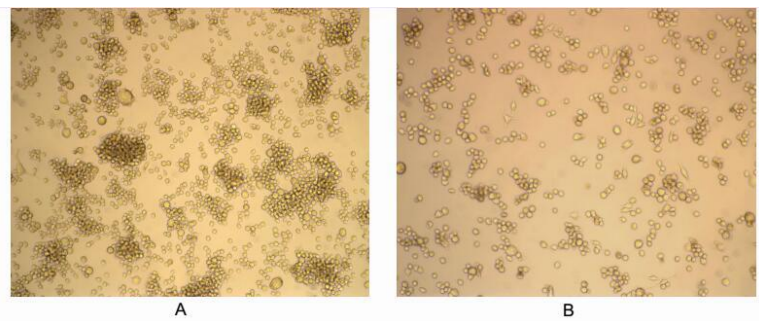


Figure 1. Effect of GM-CSF on TF-1 cells.

(A) TF-1 cells cultured in RPMI 1640, stimulated with GM-CSF (2ng/mL);

(B) Unstimulated TF-1 cells cultured in RPMI 1640.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.