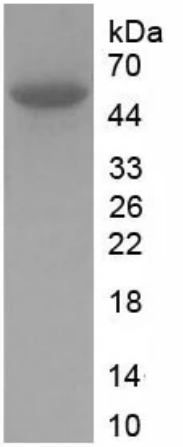
Active Colony Stimulating Factor 2, Granulocyte Macrophage (GM-CSF)

Catalog#:PEV12068

概述（Summary）

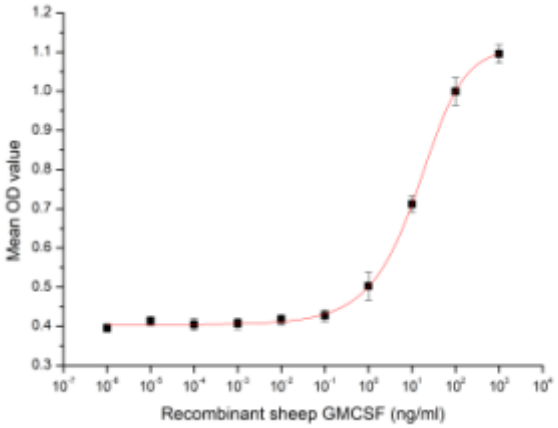
别称（Alternative Names）	CSF2; GMCSF; Sargramostim; Molgramostin; Granulocyte-Macrophage Colony Stimulating Factor
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ala18-Lys144】
Accession #	P28773
表达宿主（Host）	E.coli
种属（Species）	Ovis aries; Ovine (Sheep)
预测分子量（Predicted MW）	44.4 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 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 10mM PBS (pH7.4) 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 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



Granulocyte-macrophage colony-stimulating factor (GM-CSF), also known as colony-stimulating factor 2 (CSF2), is a monomeric glycoprotein that functions as a cytokine — it is a white blood cell growth factor. GM-CSF also has some effects on mature cells of the immune system. These include, for example, inhibiting neutrophil migration and causing an alteration of the receptors expressed on the cells surface. Besides,the proliferation of TF-1 cell line GM-CSF basic-dependent, thus, the activity of GM-CSF is usually measured by a cell proliferation assay using TF-1 cells. TF-1 cells were seeded into triplicate wells of 96-well plates at a density of 8,000 cells/well with 2% serum standard 1640 which contains various concentrations of recombinant sheep GM-CSF. After incubated for 2 days, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 2-4 hours at 37 °C. Proliferation of TF-1 cells after incubation with GM-CSF for 2 days observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant sheep GM-CSF for 2 days. The result was shown in Figure 2. It was obvious that GM-CSF significantly increased cell viability of TF-1 cells. The ED50 is 13.9 ng/ml. Figure 2. Cell proliferation of TF-1 cells after stimulated with GM-CSF.



A B

Figure 1. Cell proliferation of TF-1 cells after stimulated with GM-CSF.
(A) TF-1 cells cultured in 1640, stimulated with 1ug/ml GM-CSF for 2 days;
(B) Unstimulated TF-1 cells cultured in 1640 for 2 days.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.