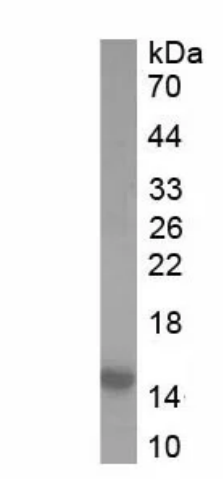
Active Platelet Factor 4 (PF4)

Catalog#:PEH12264

概述（Summary）

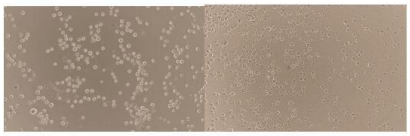
别称（Alternative Names）	CXCL4; SCYB4; Chemokine C-X-C-Motif Ligand 4; Oncostatin-A; Iroplact
纯度（Purity）	Greater than 97% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ala31-Ser101】
Accession #	P02776
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	14.5 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 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Released during platelet aggregation. Neutralizes the anticoagulant effect of heparin because it binds more strongly to heparin than to the chondroitin-4-sulfate chains of the carrier molecule. Chemotactic for neutrophils and monocytes. Inhibits endothelial cell proliferation, the short form is a more potent inhibitor than the longer form.

电泳图（SDS-PAGE image）



Greater than 97% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



A B

Figure 1. Inhibition of U937 cells proliferation after stimulated with PF4

(A) U937 cells cultured in 1640, stimulated with 10 μg/mL PF4 for 48h;
(B) Unstimulated U937 cells cultured in 1640 for 48h.

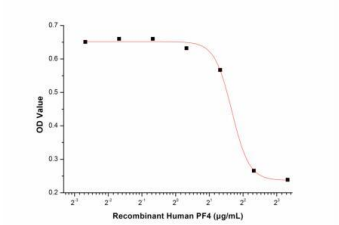


Figure 2. Inhibition of U937 cells proliferation after stimulated with PF4.

Platelet factor 4 (PF4) is a small cytokine belonging to the CXC chemokine family that is also known as chemokine (C-X-C motif) ligand 4 (CXCL4). This chemokine is released from alpha-granules of activated platelets during platelet aggregation, and promotes blood coagulation by moderating the effects of heparin-like molecules. Due to these roles, it is predicted to play a role in wound repair and inflammation. It was reported that PF4 can inhibits U937 cells proliferation. To test the effect of U937 on cell apoptosis, U937 cells were seeded into 96-well plates at a density of 5,000 cells/well with 5% serum standard 1640 including various concentrations of recombinant Human PF4. After incubated for 48 h, 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 4 hours at 37℃. Proliferation of U937 cells after incubation with PF4 for 48 h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 assay after incubation with recombinant Human PF4 for 48 h. The result was shown in Figure 2. It was obvious that PF4 significantly inhibit cell viability of U937 cells. The ED50 is 2.2-3.1μg/mL.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.