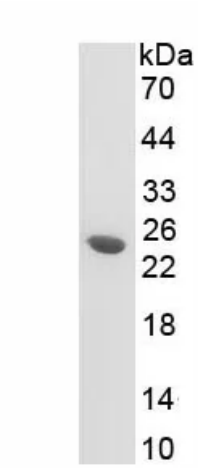
Active Interleukin 1 Alpha (IL1a)

Catalog#:PEV12109

概述（Summary）

别称（Alternative Names）	IL1-A; IL-1α; IL1F1; Preinterleukin 1 Alpha; Hematopoietin-1; Pro-Interleukin-1-Alpha; Interleukin-1 Family Member 1
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）	【Gln90-Lys268】
Accession #	P79161
表达宿主（Host）	E.coli
种属（Species）	Capra hircus; Caprine (Goat)
预测分子量（Predicted MW）	21.8 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）	Produced by activated macrophages, IL-1 stimulates thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL-1 proteins are involved in the inflammatory response, being identified as endogenous pyrogens, and are reported to stimulate the release of prostaglandin and collagenase from synovial cells.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

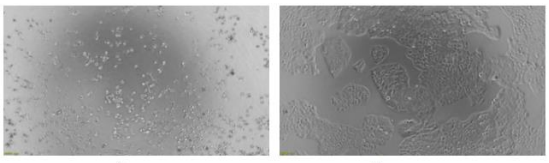


Figure 1. Inhibition of MCF7 cells proliferation after stimulated with IL-1α
(A) MCF7 cells cultured in DMEM, stimulated with 2.5 μg/ml IL-1α for 72h;
(B) Unstimulated MCF7 cells cultured in DMEM for 48h.

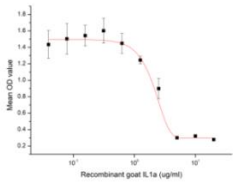


Figure 2. Inhibition of MCF7 cells proliferation after stimulated with IL-1α.

Interleukin 1 alpha (IL-1α) also known as hematopoietin 1 is a cytokine of the interleukin 1 family that in humans is encoded by the IL1A gene. IL-1αis produced mainly by activated macrophages, as well as neutrophils, epithelial cells, and endothelial cells. It possesses metabolic, physiological, haematopoietic activities, and plays one of the central roles in the regulation of the immune responses. To test the effect of IL-1α on cell apoptosis, MCF7 cells were seeded into 96-well plates at a density of 4,000 cells/well with 5% serum standard DMEM including various concentrations of recombinant goat IL-1α. After incubated for 72h, 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 1-2 hours at 37 ℃. Proliferation of MCF7 cells after incubation with IL-1α for 72h 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 goat IL-1α for 72h. The result was shown in Figure 2. It was obvious that IL-1α significantly inhibit cell viability of MCF7cells. The ED50 is 2.13 μg/ml.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.