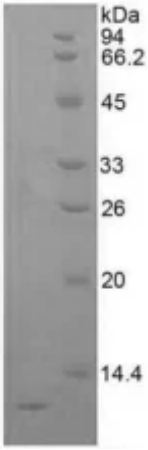
Active Interleukin 8 (IL8)

Catalog#:PEH12148

概述（Summary）

别称（Alternative Names）	CXCL8; AMCF-I; GCP1; K60; LECT; LUCT; LYNAP; MDNCF; MONAP; NAF; NAP1; SCYB8; TSG1; B-ENAP; Neutrophil-Activating Protein 1; Granulocyte Chemotactic Protein 1
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）	【Ser28-Ser99】
Accession #	p10145
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	12.0 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）	IL-8 is a chemotactic factor that attracts neutrophils, basophils, and T-cells, but not monocytes. It is also involved in neutrophil activation. It is released from several cell types in response to an inflammatory stimulus. IL-8(6-77) has a 5-10-fold higher activity on neutrophil activation, IL-8(5-77) has increased activity on neutrophil activation and IL-8(7-77) has a higher affinity to receptors CXCR1 and CXCR2 as compared to IL-8(1-77), respectively.

电泳图（SDS-PAGE image）



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

活性图（Bioactivity image）

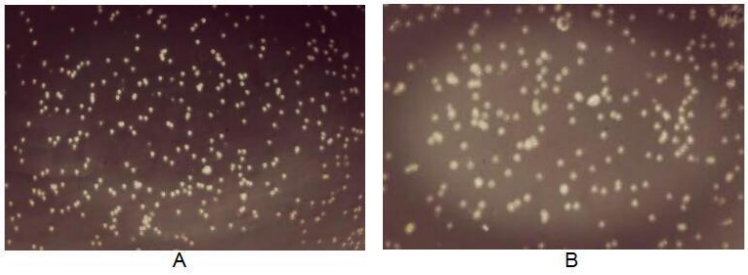
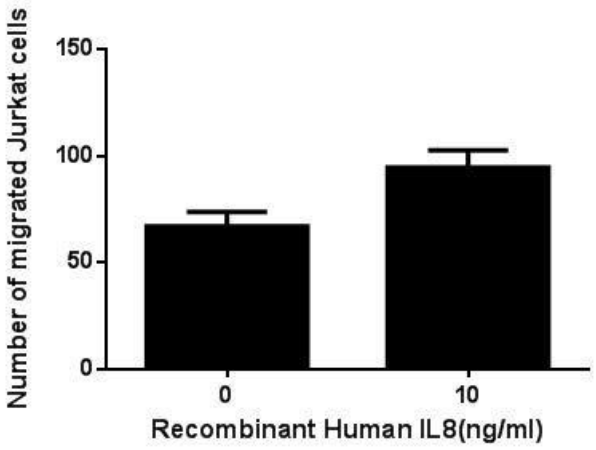


Figure. The binding activity of IL8 with SDC1. Interleukin 8 (IL8 or chemokine (C-X-C motif) ligand 8, CXCL8) is a chemokine produced by macrophages and other cell types such as epithelial cells, airway smooth muscle cellsendothelial cells. IL-8, also known as neutrophil chemotactic factor, has two primary functions. It induces chemotaxis in target cells, primarily neutrophils but also other granulocytes, causing them to migrate toward the site of infection. IL8 also induces phagocytosis once they have arrived. IL8 is also known to be a potent promoter of angiogenesis. Besides, Syndecan 1 (SDC1) has been identified as an interactor of IL8, thus a binding ELISA assay was conducted to detect the interaction of recombinant human IL8 and recombinant human SDC1. Briefly, IL8 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to SDC1-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-IL8 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of IL8 and SDC1 was shown in Figure 1, and this effect was in a dose dependent manner. Figure. The chemotactic effect of IL8 on Jurkat cells IL8 is a kind of neutrophil chemotactic factor. Thus, chemotaxis assay used 24-well microchemotaxis system was undertaken to detect the chemotactic effect of IL8 on the human T-lymphocyte leukemia cell line Jurkat. Briefly, Jurkat cells were seeded into the upper chambers (100μL cell suspension, 106cells/mL in RPMI 1640 with FBS free) and recombinant human IL8 (10ng/mL, 100ng/mL and 1000ng/mL diluted separately in serum free RPMI 1640) was added in lower chamber with a polycarbonate filter (8μm pore size) used to separate the two compartments. After incubation at 37℃ with 5% CO2 for 1h, the filter was removed, then cells in low chamber were observed by inverted microscope at low magnification (×100) and the number of migrated cells were counted at high magnification (×400) randomly (five fields for each filter). Result shows IL8 is able to induce migration of Jurkat cells. The migrated Jurkat cells in low chamber at low magnification (×100) were shown in Figure 2. Five fields of each chamber were randomly chosen, and the migrated cells were counted at high magnification (×400). Statistical results were shown in Figure 3. The optimum chemotaxis of IL8 occurs at 10~100ng/mL. (A) Jurkat cells were seeded into the upper chambers and serum free RPMI 1640 with 10ng/mL IL8 was added in lower chamber, then cells in lower chamber were observed at low magnification (×100) after incubation for 1h; (B) Jurkat cells were seeded into the upper chambers and serum free RPMI 1640

without IL8 was added in lower chamber, then cells in lower chamber were observed at low magnification (×100) after incubation for 1h. Figure. The chemotactic effect of IL8 on Jurkat cells.



注意事项（Note）

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