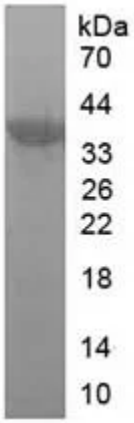
Active Chemokine (C-X-C Motif) Ligand 1 (CXCL1)

Catalog#:PEM12054

概述（Summary）

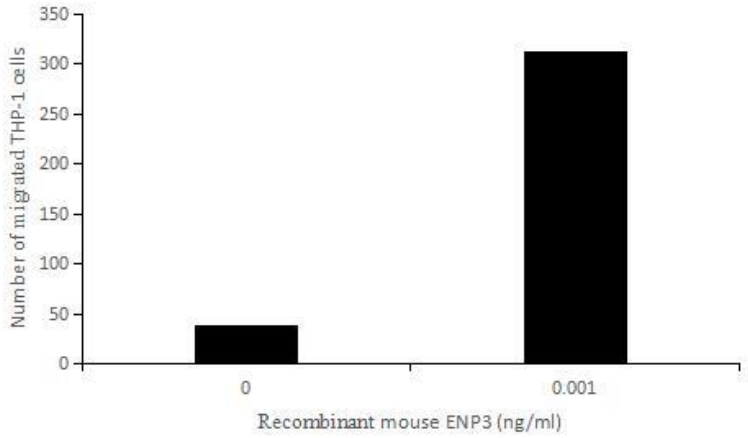
别称（Alternative Names）	NAP3; GRO1; GROa; GRO-A; MGSA-A; NAP3; SCYB1; Chemokine C-X-C-Motif Ligand 1; Melanoma Growth Stimulating Activity Alpha; Fibroblast Secretory Protein
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ala25-Lys96】
Accession #	P12850
表达宿主（Host）	E.coli
种属（Species）	Mus musculus (Mouse)
预测分子量（Predicted MW）	37.9 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）	Has chemotactic activity for neutrophils. Contributes to neutrophil activation during inflammation. Hematoregulatory chemokine, which, in vitro, suppresses hematopoietic progenitor cell proliferation. KC(5-72) shows a highly enhanced hematopoietic activity.

电泳图（SDS-PAGE image）

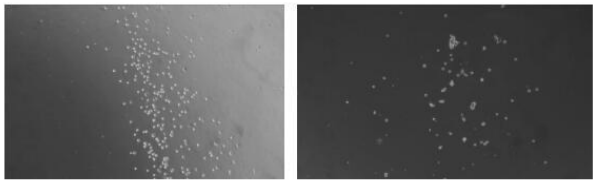


Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



Neutrophil-activating protein 3 (NAP3) also known as chemokine (C-X-C motif) ligand 1 (CXCL1) is a small cytokine belonging to the CXC chemokine family. NAP3 is expressed by macrophages, neutrophils and epithelial cells,and has neutrophil chemoattractant activity. Thus, chemotaxis assay used 24-well microchemotaxis system was undertaken to detect the chemotactic effect of NAP3 on THP-1 the human monocytic cell line. Briefly, THP-1 cells were seeded into the upper chambers (150 ul cell suspension,106 cells/ml in RPMI 1640 with FBS free) and different concentrations of recombinant mouse NAP3 diluted with serum free RPMI 1640 was added in lower chamber with a polycarbonate filter (8 um 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 recombinant mouse NAP3 is able to induce migration of THP-1 cells. The migrated THP-1 cells in low chamber at low magnification (×100) were shown in Figure 1. Statistical results were shown in Figure 2. The optimum chemotaxis of NAP3 occurs at 0.001 ng/ml. Figure 2. The chemotactic effect of NAP3 on THP-1 cells



A B

Figure 1. The chemotactic effect of NAP3 on THP-1 cells

(A) THP-1 cells were seeded into the upper chambers and serum free RPMI 1640 with 0.001 ng/ml NAP3 was added in lower chamber, then cells in lower chamber were observed at low magnification (×100) after incubation at 37 ℃ for 1h;
(B) THP-1 cells were seeded into the upper chambers and serum free RPMI 1640 without NAP3 was added in lower chamber, then cells in lower chamber were observed at low magnification (×100) after incubation at 37 ℃ for 1h.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.