

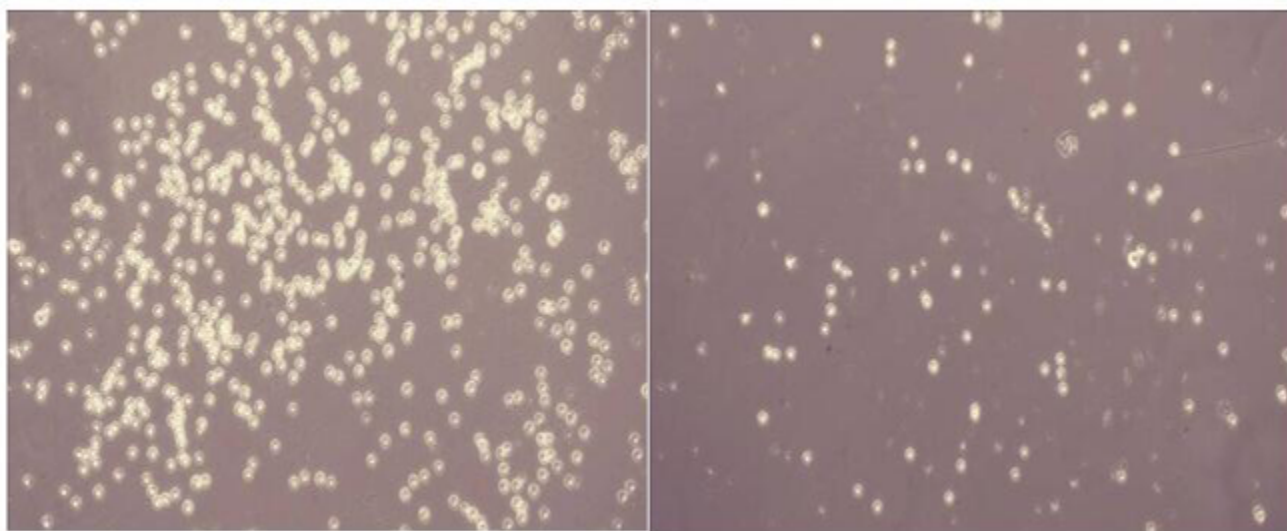
Active Chemokine (C-X-C Motif) Ligand 1 (CXCL1) Instruction Manual

SBPA024Mu01

Mus musculus (Mouse)

Buffer Formulation	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Traits	Freeze-dried powder
Purity	> 97%
Isoelectric Point	9.3
Applications	Cell culture; Activity Assays.

ACTIVITY TEST



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 plays a role in spinal cord development by inhibiting the migration of oligodendrocyte precursors and is involved in the processes of angiogenesis, arteriogenesis, inflammation, wound healing, and tumorigenesis. Thus, chemotaxis assay used 24-well microchemotaxis system was undertaken to detect the chemotactic effect of NAP3 on the human monocytic cell line THP-1. Briefly, THP-1 cells were seeded into the upper chambers (100uL cell suspension, 5×10^5 cells/ml in RPMI 1640 with FBS free) and recombinant human NAP3 (0.01ng/mL, 0.1ng/mL, 1ng/mL, 10ng/mL, 100ng/mL, 1000ng/mL diluted separately in serum free RPMI 1640) was added in lower chamber with a polycarbonate

filter (8um pore size) used to separate the two compartments. After incubation at 37°C 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 (×200) randomly (five fields for each filter). Result shows recombinant human 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. Five fields of each chamber were randomly chosen, and the migrated cells were counted at high magnification(×200). Statistical results were shown in Figure 2. The optimum chemotaxis of NAP3 occurs at 0.1~1ng/mL.

USAGE

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

STABILITY

The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

Image

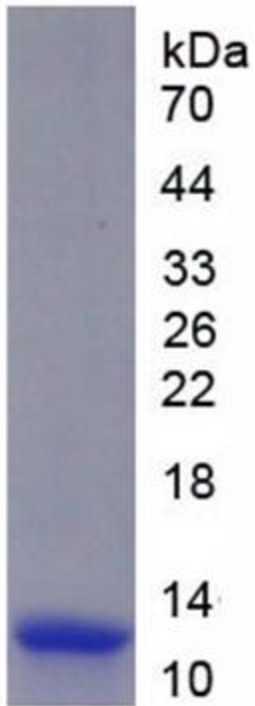


Figure. SDS-PAGE

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.