

Rat CX3CL1 protein, His tag (active)

Cat. No. GTX00363-pro
Applications Functional Assay

Species Rat

Package

10 µg

Applications

Application Note

Chemokine C-X3-C-Motif Ligand 1 (CX3CL1) also known as fractalkine is a large cytokine protein of 373 amino acids, it contains multiple domains and is the only known member of the CX3C chemokine family. Soluble CX3CL1 potentially chemoattracts T cells and monocytes, while the cell-bound chemokine promotes strong adhesion of leukocytes to activated endothelial cells, where it is primarily expressed. Thus, chemotaxis assay used 24-well microchemotaxis system was undertaken to detect the chemotactic effect of CX3CL1 on the human monocytic cell line THP-1. Briefly, THP-1 cells were seeded into the upper chambers (150 µl cell suspension, 1x10⁶ cells/ml in RPMI-1640 with FBS free) and SLC (15. 625 ng/ml, 31. 25 ng/ml, 62. 5 ng/ml and 125 ng/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°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 (×400) randomly. And CX3CL1 is able to induce migration of THP-1 cells.

Observed MW (kDa) 37 kDa.

Properties

Form Lyophilized powder

Buffer Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.

Preservative ProClin 300

Storage For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.

Region/Sequence N-terminal His-Tag; Gln83~Pro328 (NP_604450.1)

Expression System E. coli

Purity > 95%

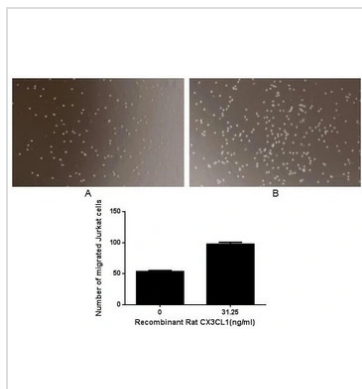
Endotoxin < 1 EU/µg

Conjugation Unconjugated

Note For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.


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DATA IMAGES



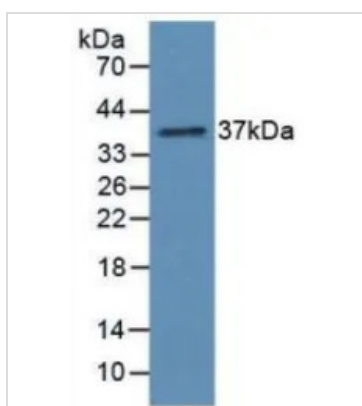
GTX00363-pro Functional Assay Image

The chemotactic effect of GTX00363-pro Rat CX3CL1 protein (active).

Upper: (A) THP-1 cells were seeded into the upper chambers and serum free RPMI-1640 without CX3CL1 was added in lower chamber, then cells in lower chamber were observed at low magnification ($\times 100$) after incubation for 1hr.

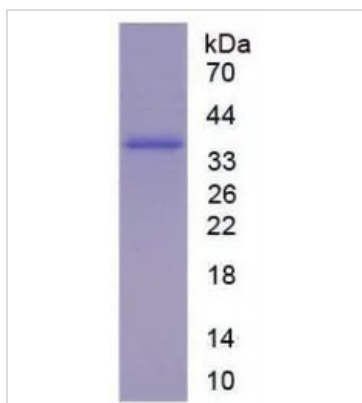
(B) THP-1 cells were seeded into the upper chambers and serum free RPMI-1640 with 31.25 ng/ml CX3CL1 was added in lower chamber, then cells in lower chamber were observed at low magnification ($\times 100$) after incubation for 1hr.

Lower: The number of migrated cells were counted at high magnification ($\times 400$) randomly (five fields for each filter).



GTX00363-pro Image

WB analysis of GTX00363-pro Rat CX3CL1 protein (active).



GTX00363-pro Image

SDS-PAGE analysis of GTX00363-pro Rat CX3CL1 protein (active).



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