

Chemokine C-X3-C-Motif Ligand 1 (CX3CL1) Active Protein | CX3CL1 active protein

Active Chemokine C-X3-C-Motif Ligand 1 (CX3CL1)

CATALOG #
AAA149224

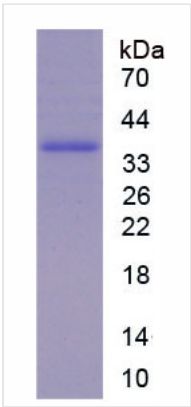
APPLICATIONS
Activity Assay, Cell Culture

PRODUCT SYNONYMS

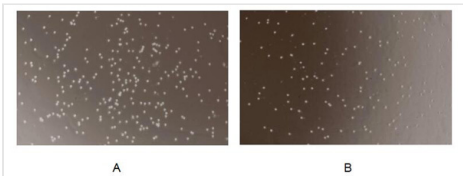
Chemokine C-X3-C-Motif Ligand 1 (CX3CL1); Active Chemokine C-X3-C-Motif Ligand 1 (CX3CL1); NTN; ABCD3; C3Xkine; CXC3; CXC3C; NTT; SCYD1; FKN; Neurotactin; Fractalkine; Small Inducible Cytokine Subfamily D(Cys-X3-Cys)Member 1; CX3CL1 active protein

PRODUCT SPECIFICATIONS

Purity/Purification	> 95%
Form/Format	Freeze-Dried Powder; 20mM Tris, 150mM NaCl, pH8.0, Containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Gln83~Pro328
Sequence Length	393
Applicable Applications for CX3CL1 active protein	Activity Assay, Cell Culture
Species	Rat
Tag	N-terminal His-Tag
Isoelectric Point	5.1
Subcellular Location	Cell Membrane; Single-Pass Type I Membrane Protein, Secrete
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. 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 degree 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.



SDS-PAGE



Activity

Figure. The chemotactic effect of CX3CL1 on THP-1 cellsChemokine 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 potently 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 (150uL cell suspension, 106 cells/mL in RPMI 1640 with FBS free) and SLC (15.625ng/mL, 31.25ng/mL, 62.5ng/mL and 125ng/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 degree 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 (five fields for each filter). Result shows CX3CL1 is able to induce migration of THP-1 cells. The migrated Jurkat 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 (×400). Statistical results were shown in Figure 2. The optimum chemotaxis of CX3CL1 occurs at 15.625-125ng/mL.(A) THP-1 cells were seeded into the upper chambers and serum free RPMI 1640 with 31.25ng/mL CX3CL1 was added in lower chamber, then cells in lower chamber were observed at low magnification (×100) after incubation for 1h; (B) 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 (×100) after incubation for 1h.

ADDITIONAL INFORMATION

Product Categories/Family for CX3CL1 active protein	Cytokine; Infection immunity; Rheumatology; Autoimmunity
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NCBI AND UNIPROT INFORMATION

NCBI GI #	19745170
NCBI GeneID	89808
NCBI Accession #	NP_604450.1
NCBI GenBank Nucleotide #	NM_134455.1
UniProt Accession #	O55145
Molecular Weight	Predicted MW: 26.9kDa Accurate MW: 37kDa
NCBI Official Full Name	fractalkine
NCBI Official Synonym Full Names	C-X3-C motif chemokine ligand 1
NCBI Official Symbol	Cx3cl1
NCBI Official Synonym Symbols	Cx3c; Scyd1
NCBI Protein Information	fractalkine
UniProt Protein Name	Fractalkine
UniProt Gene Name	Cx3cl1
UniProt Synonym Gene Names	Acc1; Fkn; Scyd1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/active-protein/chemokine-c-x3-c-motif-ligand-1-cx3cl1/149224>