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Datasheet for ABIN411273

CX3CL1 ELISA Kit

1 Image

Overview

Quantity:	96 tests
Target:	CX3CL1
Binding Specificity:	AA 25-339
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	156-10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human Fractalkine/CX3CL1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Saliva, Urine, Milk
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: Q25-R339
Specificity:	Expression system for standard: NSO Immunogen sequence: Q25-R339
Cross-Reactivity (Details):	There is detectable cross-reactivity with Eotaxin, MCP-1, MCP-2, 6Ckine, MARC < 0.2 % .

Product Details

Sensitivity: <50pg/mL

Material not included: Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target: CX3CL1

Alternative Name: CX3CL1 ([CX3CL1 Products](#))

Background: Chemokine(C-X3-C motif) ligand 1(CX3CL1) is a large cytokine protein of 373 amino acids, it contains multiple domains and is the only known member of the CX3C chemokine family. It is also commonly known under the names fractalkine(in humans) and neurotactin(in mice). CX3CL1 is produced as a long protein(with 373-amino acid in humans) with an extended mucin-like stalk and a chemokine domain on top. The mucin-like stalk permits it to bind to the surface of certain cells. However a soluble(90 kD) version of this chemokine has also been observed. 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. CX3CL1 elicits its adhesive and migratory functions by interacting with the chemokine receptor CX3CR1. Its gene is located on human chromosome 16 along with some CC chemokines known as CCL17 and CCL22. It can act as a mediator of smooth muscle cell migration in human atherosclerosis, rather than mediate inflammatory cell recruitment.

Synonyms: Chemokine (C-X3-C motif) ligand 1 ,cDNA, FLJ94424, Homo sapiens chemokine (C-X3-C motif) ligand 1 (CX3CL1), mRNA ,CX3CL1 ,hCG_15105 ,

Full Gene Name: chemokine (C-X3-C motif) ligand 1

Gene ID: 6376

UniProt: [A0N0N7](#)

Pathways: [Synaptic Membrane](#)

Application Details

Application Notes: Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.

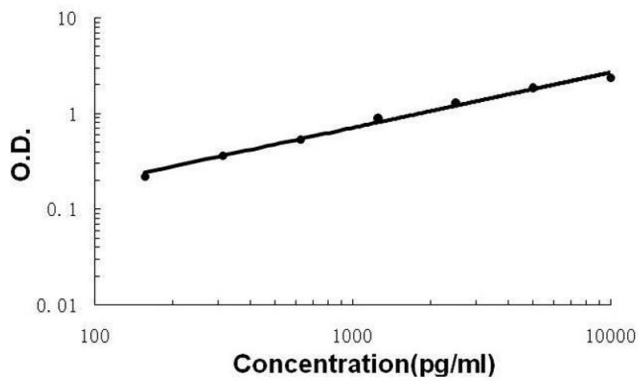
Application Details

Plate:	Pre-coated
Protocol:	human Fractalkine ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Fractalkine has been precoated onto 96-well plates. Standards(NSO, Q25-R339) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Fractalkine is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human Fractalkine amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL human Fractalkine standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum, plasma(heparin, EDTA), saliva, urine or human milk to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human Fractalkine standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 1.5, Standard deviation: 0.063, CV(%): 4.2• Sample 2: n=16, Mean(ng/ml): 3.8, Standard deviation: 0.122, CV(%): 3.2• Sample 3: n=16, Mean(ng/ml): 6.6, Standard deviation: 0.31, CV(%): 4.7,• Sample 1: n=24, Mean(ng/ml): 1.3, Standard deviation: 0.111, CV(%): 8.5• Sample 2: n=24, Mean(ng/ml): 3.7, Standard deviation: 0.237, CV(%): 6.4• Sample 3: n=24, Mean(ng/ml): 6.5, Standard deviation: 0.403, CV(%): 6.2
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

Human Fractalkine ELISA Kit



ELISA

Image 1. Human Fractalkine/CX3CL1 PicoKine ELISA Kit standard curve