Datasheet for ABIN1672784

CXCL11 ELISA Kit

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Overview

Quantity:	96 tests
Target:	CXCL11
Binding Specificity:	AA 22-94
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human CXCL11/I-TAC
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: F22-F94
Specificity:	Expression system for standard: E.coli Immunogen sequence: F22-F94
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/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:	CXCL11
Alternative Name:	CXCL11 (CXCL11 Products)
Background:	Protein Function: Chemotactic for interleukin-activated T-cells but not unstimulated T-cells, neutrophils or monocytes. Induces calcium release in activated T-cells. Binds to CXCR3. May play an important role in CNS diseases which involve T-cell recruitment. May play a role in skin immune responses. Background: Chemokine(C-X-C motif) ligand 11(CXCL11) is a small cytokine belonging to the CXC chemokine family that is also called Interferon-inducible T-cell alpha chemoattractant(I-TAC) and Interferon-gamma-inducible protein 9(IP-9). By PCR analysis of somatic cell hybrids, the CXCL11 gene was mapped to chromosome 4, and using FISH, it was located to 4q21.2. The CXCL11 was strongly induced by IFNG and beta-interferon, but only weakly induced by alpha-interferon. Induction of CXCL11 required expression of STAT1. What's more, it found that monocyte chemotaxis occurs in response to recombinant CXCL11. RT-PCR analysis detected CXCL11 expression in brain tissue from a patient with AIDS dementia and a patient with multiple sclerosis but not in 2 controls. Synonyms: C-X-C motif chemokine 11,Beta-R1,H174,Interferon gamma-inducible protein 9,IP-9,Interferon-inducible T-cell alpha chemoattractant,I-TAC,Small-inducible cytokine B11,CXCL11,ITAC, SCYB11, SCYB9B, Full Gene Name: C-X-C motif chemokine 11 Cellular Localisation: Secreted.
Gene ID:	6373
UniProt:	O14625

Application Details

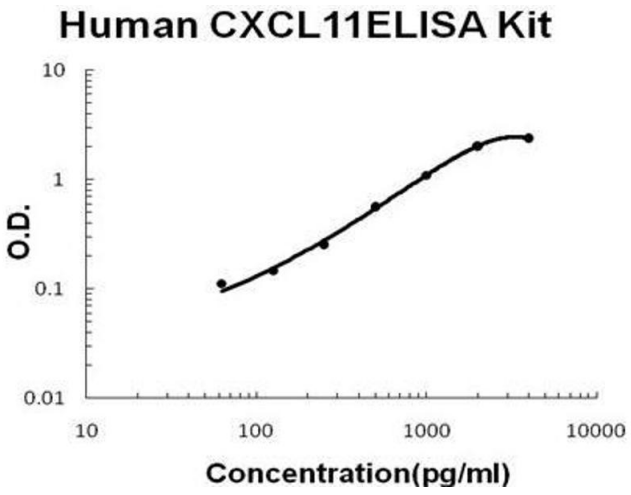
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.

Application Details

Comment:	Sequence similarities: Belongs to the intercrine alpha (chemokine CxC) family. Tissue Specificity: High levels in peripheral blood leukocytes, pancreas and liver astrocytes. Moderate levels in thymus, spleen and lung. Low levels in placenta, prostate and small intestine. Also found in epidermal basal layer keratinocytes in skin disorders.
Plate:	Pre-coated
Protocol:	human CXCL11 ELISA Kit is based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CXCL11 has been precoated onto 96-well plates. Standards(E.coli, F22-F94) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CXCL11 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB is 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 CXCL11 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL human CXCL11 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 or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human CXCL11 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 512, Standard deviation: 27.1, CV(%): 5.3 • Sample 2: n=16, Mean(pg/ml): 1259, Standard deviation: 65.5, CV(%): 5.2 • Sample 3: n=16, Mean(pg/ml): 2587, Standard deviation: 165.6, CV(%): 6.4, • Sample 1: n=24, Mean(pg/ml): 524, Standard deviation: 44.54, CV(%): 8.5 • Sample 2: n=24, Mean(pg/ml): 1128, Standard deviation: 88, CV(%): 7.8 • Sample 3: n=24, Mean(pg/ml): 2463, Standard deviation: 199.5, CV(%): 8.1
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



ELISA

Image 1. Human CXCL11/I-TAC PicoKine ELISA Kit standard curve

