

Datasheet for ABIN1889388

CCL23 ELISA Kit





Overview

Quantity:	96 tests
Target:	CCL23
Binding Specificity:	AA 22-120
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human CCL23/MPIF-1
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: R22-N120
Specificity:	Expression system for standard: E.coli Immunogen sequence: R22-N120
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<2pg/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:	CCL23
Alternative Name:	CCL23 (CCL23 Products)
Background:	Protein Function: Shows chemotactic activity for monocytes, resting T- lymphocytes, and
	neutrophils, but not for activated lymphocytes. Inhibits proliferation of myeloid progenitor cells
	in colony formation assays. This protein can bind heparin. Binds CCR1. CCL23(19-99),
	CCL23(22-99), CCL23(27-99), CCL23(30-99) are more potent chemoattractants than the small-
	inducible cytokine A23
	Background: Chemokine(C-C motif) ligand 23(CCL23), also known as MIP-3 and MPIF-1, is a
	small cytokine belonging to the CC chemokine family. It is mapped to 17q12. CCL23 is
	predominantly expressed in lung and liver tissue, but is also found in placenta, bone marrow
	and some cell lines of myeloid origin. MPIF1 has chemotactic activity on resting T lymphocytes
	and monocytes, lower activity on neutrophils. It has also been attributed to an inhibitory activity
	on hematopoietic progenitor cells that give rise to granulocyte and monocyte lineages.
	Moreover, CCL23 is a ligand for the chemokine receptor CCR1.
	Synonyms: C-C motif chemokine 23,CK-beta-8,CKB-8,Macrophage inflammatory protein 3,MIP-
	3, Myeloid progenitor inhibitory factor 1, MPIF-1, Small-inducible cytokine A23, CCL 23 (19-
	99),CCL23(22-99),CCL23(27-99),CCL23(30-99),CCL23,MIP3, MPIF1, SCYA23,
	Full Gene Name: C-C motif chemokine 23
	Cellular Localisation: Secreted.
Gene ID:	6368
UniProt:	P55773
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.
Comment:	Sequence similarities: Belongs to the intercrine beta (chemokine CC) family.

Tissue Specificity: High levels in adult lung, liver, skeletal muscle and pancreas. Moderate levels		
in fetal liver, adult bone marrow and placenta. The short form is the major species and the		
longer form was detected only in very low abundance. CCL23(19-99), CCL23(22-99), CCL23(27-		
99), CCL23(30-99) are found in high levels in synovial fluids from rheumatoid patients		

Plate: Pre-coated

Protocol:

human CCL23 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CCL23 has been precoated onto 96-well plates. Standards(E.coli, R22-N120) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CCL23 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 CCL23 amount of sample captured in plate.

Assay Procedure:

Aliquot 0.1 mL per well of the 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL human CCL23 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 CCL23 standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 118, Standard deviation: 4.13, CV(%): 3.5
- Sample 2: n=16, Mean(pg/ml): 447, Standard deviation: 18.77, CV(%): 4.2
- Sample 3: n=16, Mean(pg/ml): 1273, Standard deviation: 6.24, CV(%): 4.9,
- Sample 1: n=24, Mean(pg/ml): 124, Standard deviation: 8.93, CV(%): 7.2
- Sample 2: n=24, Mean(pg/ml): 462, Standard deviation: 36.50, CV(%): 7.9
- Sample 3: n=24, Mean(pg/ml): 1308, Standard deviation: 108.56, CV(%): 8.3

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 CCL23/MPIF-1 PicoKine ELISA Kit standard curve