Datasheet for ABIN921093

CXCL10 ELISA Kit

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Overview

Quantity:	96 tests
Target:	CXCL10
Binding Specificity:	AA 22-98
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 CXCL10/IP-10
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Saliva, Urine
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: V22-P98
Specificity:	Expression system for standard: E.coli Immunogen sequence: V22-P98
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<1pg/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:	CXCL10
Alternative Name:	CXCL10 (CXCL10 Products)
Background:	Protein Function: Chemotactic for monocytes and T-lymphocytes. Binds to CXCR3. Background: Chemokine(C-X-C motif) ligand 10(CXCL10) or IP-10 is a small cytokine belonging to the CXC chemokine family that is also known as 10 kDa interferon-gamma-induced protein(gamma-IP10 or IP-10). CXCL10 is secreted by several cell types in response to IFN-gamma. These cell types include monocytes, endothelial cells and fibroblasts. CXCL10 has been attributed to several roles, such as chemoattraction for monocytes/macrophages, T cells, NK cells, and dendritic cells, promotion of T cell adhesion to endothelial cells, antitumor activity, and inhibition of bone marrow colony formation and angiogenesis.It is a potent inhibitor of angiogenesis in vivo. The gene for CXCL10 is located on human chromosome 4 in a cluster among several other CXC chemokines. It is a RAS target gene and is overexpressed in the majority of colorectal cancers.This chemokine elicits its effects by binding to the cell surface chemokine receptor CXCR3. Synonyms: C-X-C motif chemokine 10,10 kDa interferon gamma-induced protein,Gamma-IP10,IP-10,Small-inducible cytokine B10,CXCL10(1-73),CXCL10,INP10, SCYB10, Full Gene Name: C-X-C motif chemokine 10 Cellular Localisation: Secreted.
Gene ID:	3627
UniProt:	P02778

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 alpha (chemokine CxC) family.

Application Details

Plate:	Pre-coated
Protocol:	human CXCL10 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CXCL10 has been precoated onto 96-well plates. Standards(E.coli, V22-P98) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CXCL10 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 CXCL10 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 CXCL10 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 or urine to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human CXCL10 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 225, Standard deviation: 11.7, CV(%): 5.2 • Sample 2: n=16, Mean(pg/ml): 837, Standard deviation: 38.5, CV(%): 4.6 • Sample 3: n=16, Mean(pg/ml): 1469, Standard deviation: 89.6, CV(%): 6.1, • Sample 1: n=24, Mean(pg/ml): 273, Standard deviation: 18.3, CV(%): 6.7 • Sample 2: n=24, Mean(pg/ml): 996, Standard deviation: 58.8, CV(%): 5.9 • Sample 3: n=24, Mean(pg/ml): 1478, Standard deviation: 115.3, CV(%): 7.8
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

Publications

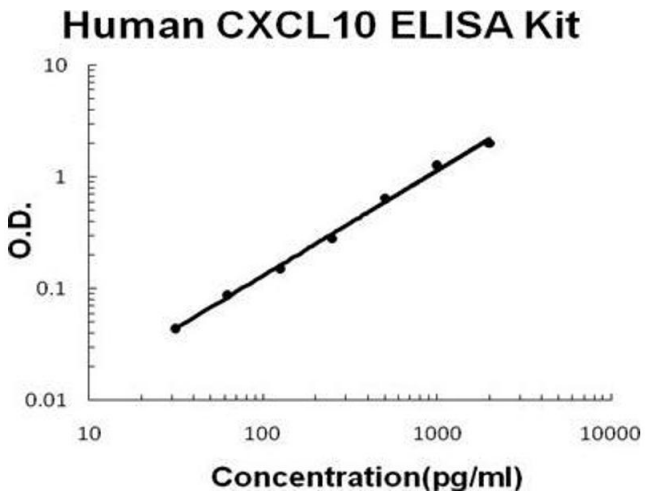
Product cited in:	Esfahani, Saidijam, Najafi, Goodarzi, Movahedian: "The effect of salusin-β on expression of pro-

Publications

and anti-inflammatory cytokines in human umbilical vein endothelial cells (HUVECs)." in: **ARYA atherosclerosis**, Vol. 14, Issue 1, pp. 1-10, (2018) (PubMed).

McCarthy: "Management. The name game." in: **Nursing times**, Vol. 85, Issue 1, pp. 44-5, (1989) (PubMed).

Images



ELISA

Image 1. Human CXCL10/IP-10 PicoKine ELISA Kit standard curve