Datasheet for ABIN1889316

CXCL7 ELISA Kit

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Overview

Quantity:	96 tests
Target:	CXCL7 (PPBP)
Binding Specificity:	AA 59-128
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	15.6-1000 pg/mL
Minimum Detection Limit:	15.6 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human CXCL7
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: A59-D128
Specificity:	Expression system for standard: E.coli Immunogen sequence: A59-D128
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:	CXCL7 (PPBP)
Alternative Name:	CXCL7 (PPBP Products)
Background:	Protein Function: LA-PF4 stimulates DNA synthesis, mitosis, glycolysis, intracellular cAMP accumulation, prostaglandin E2 secretion, and synthesis of hyaluronic acid and sulfated glycosaminoglycan. It also stimulates the formation and secretion of plasminogen activator by human synovial cells. NAP-2 is a ligand for CXCR1 and CXCR2, and NAP-2, NAP-2(73), NAP-2(74), NAP-2(1-66), and most potent NAP-2(1-63) are chemoattractants and activators for neutrophils. TC-1 and TC-2 are antibacterial proteins, in vitro released from activated platelet alpha-granules. CTAP-III(1-81) is more potent than CTAP-III desensitize chemokine-induced neutrophil activation. . Background: Chemokine(C-X-C motif) ligand 7(CXCL7), also called PPBP or SCYB7, is a human gene. The encoded protein, Chemokine(C-X-C motif) ligand is a small cytokine belonging to the CXC chemokine family. CXCL7 is mapped to 4q13.3. It is a protein that is released in large amounts from platelets following their activation. CXCL7 is the precursor of the 2 platelet alpha-granule proteins, platelet basic protein(PBP) and connective tissue-activating peptide III(CTAP3). It stimulates various processes including mitogenesis, synthesis of extracellular matrix, glucose metabolism and synthesis of plasminogen activator. It also stimulates the formation and secretion of plasminogen activator by synovial cells. Synonyms: Platelet basic protein,PBP,C-X-C motif chemokine 7,Leukocyte-derived growth factor,LDGF,Macrophage-derived growth factor,MDGF,Small-inducible cytokine B7,Connective tissue-activating peptide III,CTAP-III,LA-PF4,Low-affinity platelet factor IV,TC-2,Connective tissue-activating peptide III(1-81),CTAP-III(1-81),Beta-thromboglobulin,Beta-TG,Neutrophil-activating peptide 2(74),NAP-2(74),Neutrophil-activating peptide 2(73),NAP-2(73),Neutrophil-activating peptide 2,NAP-2,TC-1,Neutrophil-activating peptide 2(1-66),NAP-2(1-66),Neutrophil-activating peptide 2(1-63),NAP-2(1-63),PPBP,CTAP3, CXCL7, SCYB7, TGB1, THBGB1, Full Gene Name: Platelet basic protein Cellular Localisation: Secreted.

Target Details

Gene ID:	5473
UniProt:	P02775

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.
Plate:	Pre-coated
Protocol:	human CXCL7 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CXCL7 has been precoated onto 96-well plates. Standards(E.coli, A59-D128) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CXCL7 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 CXCL7 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL, 15.6pg/mL human CXCL7 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 CXCL7 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 85.6, Standard deviation: 3.85, CV(%): 4.5 • Sample 2: n=16, Mean(pg/ml): 227, Standard deviation: 12.7, CV(%): 5.6 • Sample 3: n=16, Mean(pg/ml): 519, Standard deviation: 30.1, CV(%): 5.8, • Sample 1: n=24, Mean(pg/ml): 82.8, Standard deviation: 6.13, CV(%): 7.4 • Sample 2: n=24, Mean(pg/ml): 236, Standard deviation: 14.6, CV(%): 6.2 • Sample 3: n=24, Mean(pg/ml): 527, Standard deviation: 37.4, CV(%): 7.1
Restrictions:	For Research Use only

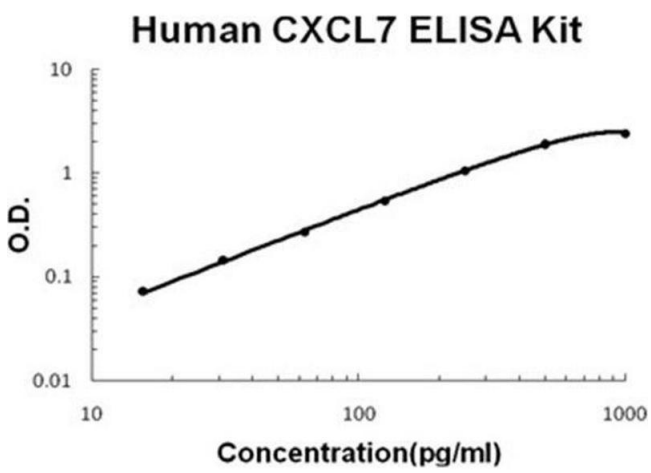
Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.

Handling

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

Images



ELISA

Image 1. Human CXCL7 PicoKine ELISA Kit standard curve