Datasheet for ABIN411397

CXCL16 ELISA Kit

1 Image | 1 Publication

Go to Product page

Overview

Quantity:	96 tests
Target:	CXCL16
Binding Specificity:	AA 27-114
Reactivity:	Mouse
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 Mouse CXCL16
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: N27-P114
Specificity:	Expression system for standard: E.coli Immunogen sequence: N27-P114
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:	CXCL16
Alternative Name:	CXCL16 (CXCL16 Products)
Background:	Protein Function: Induces a strong chemotactic response. Induces calcium mobilization. Binds to CXCR6/Bonzo. Also acts as a scavenger receptor on macrophages, which specifically binds to OxLDL (oxidized low density lipoprotein), suggesting that it may be involved in pathophysiology such as atherogenesis. . Background: Chemokine(C-X-C motif) ligand 16(CXCL16) is a small cytokine belonging to the CXC chemokine family. Larger than other chemokines(with 254 amino acids), CXCL16 is composed of a CXC chemokine domain, a mucin-like stalk, a transmembrane domain and a cytoplasmic tail containing a potential tyrosine phosphorylation site that may bind SH2. These are unusual features for a chemokine, and allow CXCL16 to be expressed as a cell surface bound molecule, as well as a soluble chemokine. CXCL16 is produced by dendritic cells found in the T cell zones of lymphoid organs, and by cells found in the red pulp of the spleen. Cells that bind and migrate in response to CXCL16 include several subsets of T cells, and natural killer T(NKT) cells. CXCL16 interacts with the chemokine receptor CXCR6, also known as Bonzo. Expression of CXCL16 is induced by the inflammatory cytokines IFN-gamma and TNF-alpha.2 The gene for human CXCL16 is located on chromosome 17p13. The standard product used in this kit is recombinant mouse CXCL16, consisting of 88 amino acids with the molecular mass of 9.9KDa. Synonyms: C-X-C motif chemokine 16,Scavenger receptor for phosphatidylserine and oxidized low density lipoprotein,SR-PSOX,Small-inducible cytokine B16,Transmembrane chemokine CXCL16,Cxcl16,Srpsox, Full Gene Name: C-X-C motif chemokine 16 Cellular Localisation: Membrane, Single-pass type I membrane protein.
Gene ID:	66102
UniProt:	Q8BSU2

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:	Tissue Specificity: Widely expressed. Not detected in purified B- and T-cells. .
Plate:	Pre-coated
Protocol:	mouse CXCL16 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for CXCL16 has been precoated onto 96-well plates. Standards(E.coli, N27-P114) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CXCL16 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 mouse CXCL16 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 mouse CXCL16 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 mouse cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse CXCL16 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 125, Standard deviation: 6, CV(%): 4.8 • Sample 2: n=16, Mean(pg/ml): 357, Standard deviation: 21.8, CV(%): 6.1 • Sample 3: n=16, Mean(pg/ml): 556, Standard deviation: 28.9, CV(%): 5.2, • Sample 1: n=24, Mean(pg/ml): 130, Standard deviation: 7.9, CV(%): 6.1 • Sample 2: n=24, Mean(pg/ml): 349, Standard deviation: 25.8, CV(%): 7.4 • Sample 3: n=24, Mean(pg/ml): 618, Standard deviation: 38.9, CV(%): 6.3
Restrictions:	For Research Use only

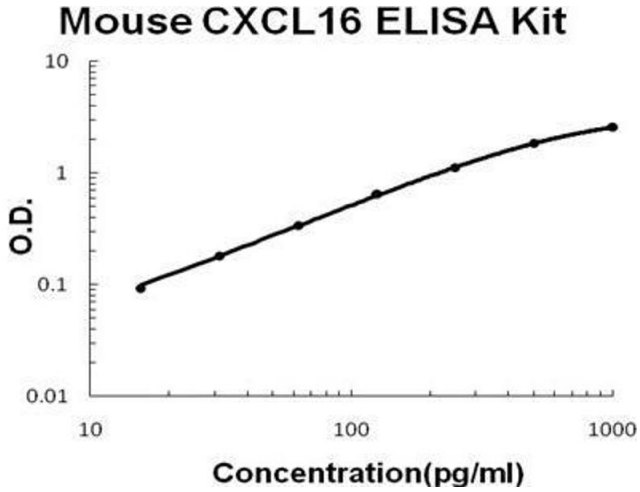
Handling

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

Publications

Product cited in:	Cai, Zhu, Ao, Ye, Zhang, Chai, Wang, Shi, Cao, Li, Sun: "Colony-stimulating factor-1-induced AIF1 expression in tumor-associated macrophages enhances the progression of hepatocellular carcinoma." in: **Oncoimmunology**, Vol. 6, Issue 9, pp. e1333213, (2017) (PubMed).

Images



ELISA

Image 1. Mouse CXCL16 PicoKine ELISA Kit standard curve