Datasheet for ABIN1672835

CXCL5 ELISA Kit

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Overview

Quantity:	96 tests
Target:	CXCL5
Binding Specificity:	AA 45-118
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 CXCL5/ENA-78
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Plasma (citrate)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: V45-A118
Specificity:	Expression system for standard: E.coli Immunogen sequence: V45-A118
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

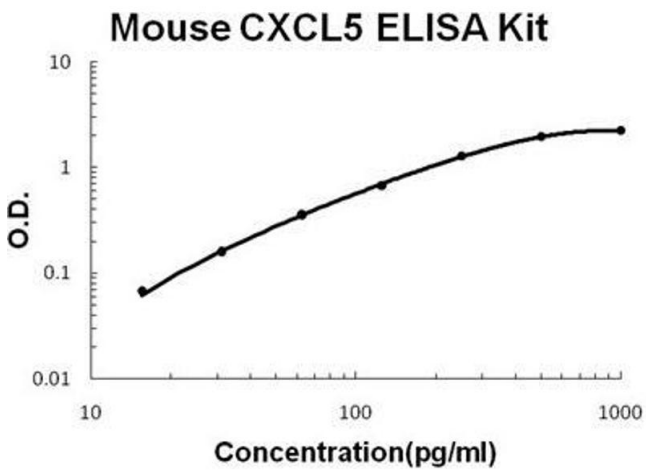
Target:	CXCL5
Alternative Name:	CXCL5 (CXCL5 Products)
Background:	Protein Function: May participate in the recruitment of inflammatory cells by injured or infected tissue. GCP-2(1-78) and, more potent, GCP- 2(9-78) attract neutrophils and are involved in neutrophil activation. . Background: C-X-C motif chemokine 5 is a protein that in humans encoded by the CXCL5 gene. The protein encoded by this gene, CXCL5 is a small cytokine belonging to the CXC chemokine family that is also known as epithelial-derived neutrophil-activating peptide 78(ENA-78). It is produced following stimulation of cells with the inflammatory cytokines interleukin-1or tumor necrosis factor-alpha. Expression of CXCL5 has also been observed in eosinophils, and can be inhibited with the type II interferon IFN-gamma. This chemokine stimulates the chemotaxis of neutrophils possessing angiogenic properties. It elicits these effects by interacting with the cell surface chemokine receptor CXCR2. The gene for CXCL5 is encoded on four exons and is located on humanchromosome 4 amongst several other CXC chemokine genes. CXCL5 has been implicated in connective tissue remodeling. CXCL5 plays a role in reducing sensitivity to sunburn pain in some subjects, and is a potential target which can be utilized to understand more about pain in other inflammatory conditions like arthritis and cystitis. Synonyms: C-X-C motif chemokine 5,Cytokine LIX,Small-inducible cytokine B5,GCP-2(1-78),GCP-2(9-78),Cxcl5,Scyb5, Full Gene Name: C-X-C motif chemokine 5 Cellular Localisation: Secreted.
Gene ID:	20311
UniProt:	P50228
Pathways:	Cellular Response to Molecule of Bacterial Origin, Regulation of Leukocyte Mediated Immunity

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.
Plate:	Pre-coated
Protocol:	mouse CXCL5 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for CXCL5 has been precoated onto 96-well plates. Standards(E.coli, V45-A118) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CXCL5 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 CXCL5 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 CXCL5 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, citrate) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse CXCL5 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 89, Standard deviation: 4.54, CV(%): 5.1 • Sample 2: n=16, Mean(pg/ml): 238, Standard deviation: 13.3, CV(%): 5.6 • Sample 3: n=16, Mean(pg/ml): 496, Standard deviation: 18.9, CV(%): 3.8, • Sample 1: n=24, Mean(pg/ml): 103, Standard deviation: 7.42, CV(%): 7.2 • Sample 2: n=24, Mean(pg/ml): 276, Standard deviation: 20.7, CV(%): 7.5 • Sample 3: n=24, Mean(pg/ml): 513, Standard deviation: 32.8, CV(%): 6.4
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. Mouse CXCL5/ENA-78 PicoKine ELISA Kit standard curve