Datasheet for ABIN1672742

CCL7 ELISA Kit

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Overview

Quantity:	96 tests
Target:	CCL7
Binding Specificity:	AA 24-99
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 CCL7/MCP-3
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: Q24-L99
Specificity:	Expression system for standard: E.coli Immunogen sequence: Q24-L99
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:	CCL7
Alternative Name:	CCL7 (CCL7 Products)
Background:	Protein Function: Chemotactic factor that attracts monocytes and eosinophils, but not neutrophils. Augments monocyte anti-tumor activity. Also induces the release of gelatinase B. This protein can bind heparin. Binds to CCR1, CCR2 and CCR3. Background: Chemokine(C-C motif) ligand 7(CCL7) is a small cytokine known as a chemokine that was previously called monocyte-specific chemokine 3(MCP3). It belongs to the C-C chemokine family. By fluorescence in situ hybridization, mapped the MCP3 gene to chromosome 17q11.2-q12. MCP3 was identified as a physiologic substrate of gelatinase A. Cleaved MCP3 binds to CC-chemokine receptors-1, -2, and -3, but no longer induces calcium fluxes or promotes chemotaxis, and instead acts as a general chemokine antagonist that dampens inflammation, suggested that matrix metalloproteinases are both effectors and regulators of the inflammatory response. Synonyms: C-C motif chemokine 7,Monocyte chemoattractant protein 3,Monocyte chemotactic protein 3,MCP-3,NC28,Small-inducible cytokine A7,CCL7,MCP3, SCYA6, SCYA7, Full Gene Name: C-C motif chemokine 7 Cellular Localisation: Secreted.
Gene ID:	6354
UniProt:	P80098

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.
Plate:	Pre-coated

Application Details

Protocol:	human CCL7 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CCL7 has been precoated onto 96-well plates. Standards(E.coli, Q24-L99) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CCL7 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 CCL7 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 CCL7 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 CCL7 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 154, Standard deviation: 6.78, CV(%): 4.4 • Sample 2: n=16, Mean(pg/ml): 296, Standard deviation: 14.8, CV(%): 5 • Sample 3: n=16, Mean(pg/ml): 577, Standard deviation: 35.2, CV(%): 6.1, • Sample 1: n=24, Mean(pg/ml): 166, Standard deviation: 11.3, CV(%): 6.8 • Sample 2: n=24, Mean(pg/ml): 325, Standard deviation: 22.43, CV(%): 6.9 • Sample 3: n=24, Mean(pg/ml): 593, Standard deviation: 42.7, CV(%): 7.2
Restrictions:	For Research Use only

Handling

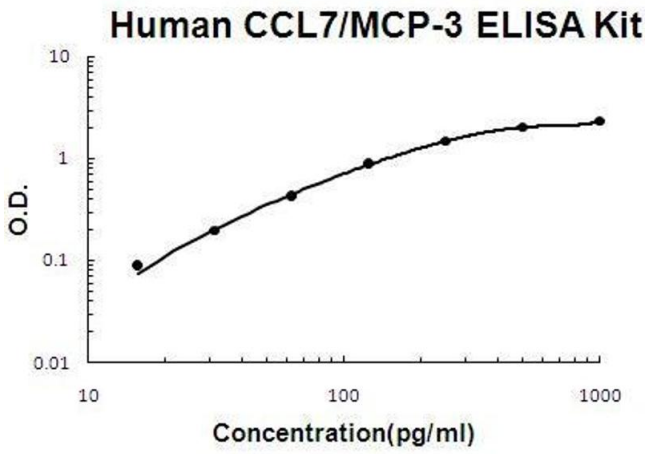
Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

Publications

Product cited in:	Xu, Feng, Wang, Zhu, Lin, Lou, Xiang, He, Zheng, Tang, Zuo: "Phytoestrogen calycosin-7-O-?-D-glucopyranoside ameliorates advanced glycation end products-induced HUVEC damage." in: **Journal of cellular biochemistry**, Vol. 112, Issue 10, pp. 2953-65, (2011) (PubMed).

Publications

Images



ELISA

Image 1. Human CCL7/MCP-3 PicoKine ELISA Kit standard curve