

Datasheet for ABIN1672741

CCL8 ELISA Kit



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Overview

Quantity:	96 tests
Target:	CCL8
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 CCL8/MCP-2
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-P99
Specificity:	Expression system for standard: E.coli Immunogen sequence: Q24-P99
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:	CCL8
Alternative Name:	CCL8 (CCL8 Products)
Background:	<p>Protein Function: Chemotactic factor that attracts monocytes, lymphocytes, basophils and eosinophils. May play a role in neoplasia and inflammatory host responses. This protein can bind heparin. The processed form MCP-2(6-76) does not show monocyte chemotactic activity, but inhibits the chemotactic effect most predominantly of CCL7, and also of CCL2 and CCL5 and CCL8. .</p> <p>Background: Chemokine(C-C motif) ligand 8, also known as monocyte chemoattractant protein 2(MCP-2), is a protein that in humans is encoded by the CCL8 gene. CCL8 is a small cytokine belonging to the CC chemokine family. The CCL8 protein is produced as a precursor containing 109 amino acids, which is cleaved to produce mature CCL8 containing 75 amino acids. The gene for CCL8 is encoded by 3 exons and is located within a large cluster of CC chemokines on chromosome 17q11.2 in humans. Monocyte chemotactic protein 2(MCP-2) is a CC chemokine that utilizes multiple cellular receptors to attract and activate human leukocytes.</p> <p>Synonyms: C-C motif chemokine 8,HC14,Monocyte chemoattractant protein 2,Monocyte chemotactic protein 2,MCP-2,Small-inducible cytokine A8,MCP-2(6-76),CCL8,MCP2, SCYA10, SCYA8,</p> <p>Full Gene Name: C-C motif chemokine 8</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	6355
UniProt:	P80075

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.

Application Details

Tissue Specificity: Highest expression found in the small intestine and peripheral blood cells. Intermediate levels seen in the heart, placenta, lung, skeletal muscle, thymus, colon, ovary, spinal cord and pancreas. Low levels seen in the brain, liver, spleen and prostate.

Plate: Pre-coated

Protocol: human CCL8 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CCL8 has been precoated onto 96-well plates. Standards(E.coli, Q24-P99) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CCL8 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 CCL8 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 CCL8 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 CCL8 standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 144, Standard deviation: 7.5, CV(%): 5.2
- Sample 2: n=16, Mean(pg/ml): 388, Standard deviation: 25.61, CV(%): 6.6
- Sample 3: n=16, Mean(pg/ml): 607, Standard deviation: 24.28, CV(%): 4,
- Sample 1: n=24, Mean(pg/ml): 158, Standard deviation: 9.8, CV(%): 6.2
- Sample 2: n=24, Mean(pg/ml): 406, Standard deviation: 28.83, CV(%): 7.1
- Sample 3: n=24, Mean(pg/ml): 627, Standard deviation: 30.1, CV(%): 4.8

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

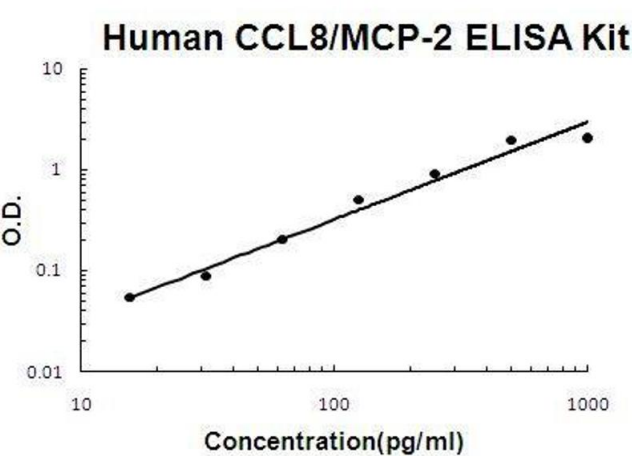
Publications

Product cited in: Tu, Chen, Yang, Qi, Lu, Zhao: "Amyloid- β Activates Microglia and Regulates Protein Expression in a Manner Similar to Prions." in: **Journal of molecular neuroscience : MN**, Vol. 56, Issue 2, pp. 509-18, (2015) ([PubMed](#)).

Tu, Yang, Zhou, Qi, Wang, Kouadir, Xu, Yin, Zhao: "PrP106-126 and A β 1-42 peptides induce BV-2 microglia chemotaxis and proliferation." in: **Journal of molecular neuroscience : MN**, Vol. 52, Issue 1, pp. 107-16, (2014) ([PubMed](#)).

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

Images



ELISA

Image 1. Human CCL8/MCP-2 PicoKine ELISA Kit standard curve