Datasheet for ABIN1889303

CCL1 ELISA Kit

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Overview

Quantity:	96 tests
Target:	CCL1
Binding Specificity:	AA 24-92
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	7.8-500 pg/mL
Minimum Detection Limit:	7.8 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse CCL1/TCA3
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: K24-C92
Specificity:	Expression system for standard: NSO Immunogen sequence: K24-C92
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:	CCL1
Alternative Name:	CCL1 (CCL1 Products)
Background:	Protein Function: Cytokine that is chemotactic for neutrophils. Background: CCL1, Chemokine(C-C motif) ligand 1, is one of several cytokine genes clustered on the q-arm of chromosome 17. Cytokines are a family of secreted proteins involved in immunoregulatory and inflammatory processes. The protein encoded by this gene is structurally related to the CXC subfamily of cytokines. Members of this subfamily are characterized by two cysteines separated by a single amino acid. This cytokine is secreted by activated T cells and displays chemotactic activity for monocytes but not for neutrophils. It binds to the chemokine receptor CCR8. Synonyms: C-C motif chemokine 1,P500,SIS-epsilon,Small-inducible cytokine A1,T-cell activation protein 3,TCA-3,TCA3,Ccl1,Scya1, Tca3, Full Gene Name: C-C motif chemokine 1
Gene ID:	20290
UniProt:	P10146

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 CCL1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for CCL1 has been precoated onto 96-well plates. Standards(NSO, K24-C92) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CCL1 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and

Application Details

	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 CCL1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.3pg/mL, 15.6pg/mL, 7.8pg/mL mouse CCL1 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. We recommend that each mouse CCL1 standard solution and each sample is measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 34, Standard deviation: 1.5, CV(%): 4.4 • Sample 2: n=16, Mean(pg/ml): 121, Standard deviation: 6.9, CV(%): 5.7 • Sample 3: n=16, Mean(pg/ml): 389, Standard deviation: 25.7, CV(%): 6.6, • Sample 1: n=24, Mean(pg/ml): 35, Standard deviation: 2.2, CV(%): 6.3 • Sample 2: n=24, Mean(pg/ml): 127, Standard deviation: 8.6, CV(%): 6.8 • Sample 3: n=24, Mean(pg/ml): 403, Standard deviation: 32.6, CV(%): 8.1
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:	Zhang, Shi, Zou, Chen, Tang, Ye, Liu: "High glucose stimulates cell proliferation and Collagen IV production in rat mesangial cells through inhibiting AMPK-KATP signaling." in: **International urology and nephrology**, Vol. 49, Issue 11, pp. 2079-2086, (2018) (PubMed). Gishto, Farrell, Kothapalli: "Tuning composition and architecture of biomimetic scaffolds for enhanced matrix synthesis by murine cardiomyocytes." in: **Journal of biomedical materials research. Part A**, Vol. 103, Issue 2, pp. 693-708, (2015) (PubMed).

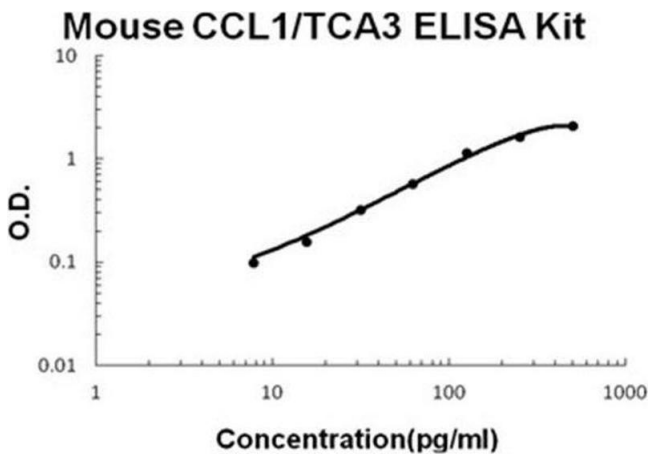
Publications

Cavdar, Ozbal, Celik, Ergur, Guneli, Ural, Camsari, Guner: "The effects of alpha-lipoic acid on MMP-2 and MMP-9 activities in a rat renal ischemia and re-perfusion model." in: **Biotechnic & histochemistry : official publication of the Biological Stain Commission**, Vol. 89, Issue 4, pp. 304-14, (2014) (PubMed).

Xu, Ling, Zhu, Fan, Zhang: "The effect of 2,3,4',5-tetrahydroxystilbene-2-0-?-D glucoside on neointima formation in a rat artery balloon injury model and its possible mechanisms." in: **European journal of pharmacology**, Vol. 698, Issue 1-3, pp. 370-8, (2013) (PubMed).

Kim, Lee, Choi, Yoo, Yang: "Implication of MMP-9 and urokinase plasminogen activator (uPA) in the activation of pro-matrix metalloproteinase (MMP)-13." in: **Rheumatology international**, Vol. 32, Issue 10, pp. 3069-75, (2012) (PubMed).

Images



ELISA

Image 1. Mouse CCL1/TCA3 PicoKine ELISA Kit standard curve