

Datasheet for ABIN411324

CCL22 ELISA Kit[Go to Product page](#)**1** Image**2** Publications

Overview

Quantity: 96 tests

Target: CCL22

Binding Specificity: AA 25-92

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 MDC

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: G25-S92Specificity: Expression system for standard: E.coli
Immunogen sequence: G25-S92

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: CCL22

Alternative Name: CCL22 ([CCL22 Products](#))

Background: Protein Function: Chemotactic for activated T-lymphocytes. May play an important role in the collaboration of dendritic cells and B- lymphocytes with T-cells in immune responses.

Background: Macrophage-derived chemokine(MDC), also called Chemokine, cc motif, ligand 22(CCL22) or Small inducible cytokine subfamily A, member 22(SCY22). MDC is a recently identified member of the CC chemokine family. It is not closely related to other chemokines, sharing most similarity with thymus- and activation-regulated chemokine(TARC), which contains 37 % identical amino acids. In addition, MDC gene is mapped to chromosome 16q13, the same position reported for the TARC gene. MDC has the four-cysteine motif and other highly conserved residues characteristic of CC chemokines, but it shares<35 % identity with any of the known chemokines. Recombinant MDC was expressed in Chinese hamster ovary cells and purified by heparin-Sepharose chromatography. MDC is highly expressed in macrophages and in monocyte-derived dendritic cells, but not in monocytes, natural killer cells, or several cell lines of epithelial, endothelial, or fibroblast origin. High expression was also detected in normal thymus and less expression in lung and spleen. MDC is thus a unique member of the CC chemokine family that may play a fundamental role in the function of dendritic cells, natural killer cells, and monocytes.

Synonyms: C-C motif chemokine 22,Activated B and dendritic cell-derived,CC chemokine ABCD-1,Small-inducible cytokine A22,Ccl22,Abcd1, Scya22,

Full Gene Name: C-C motif chemokine 22

Cellular Localisation: Secreted.

Gene ID: 20299

UniProt: [O88430](#)

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: Expressed by activated splenic B-lymphocytes and dendritic cells. Low expression in lung, thymocytes, lymph node, and unstimulated splenic cells.
Plate:	Pre-coated
Protocol:	mouse MDC ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for MDC has been precoated onto 96-well plates. Standards(E.coli, G25-S92) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for MDC 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 MDC 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 MDC 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 MDC standard solution and each sample be measured in duplicate.

Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(pg/ml): 124, Standard deviation: 8.31, CV(%): 6.7• Sample 2: n=16, Mean(pg/ml): 377, Standard deviation: 18.5, CV(%): 4.9• Sample 3: n=16, Mean(pg/ml): 682, Standard deviation: 36.83, CV(%): 5.4• Sample 1: n=24, Mean(pg/ml): 147, Standard deviation: 10.88, CV(%): 7.4• Sample 2: n=24, Mean(pg/ml): 421, Standard deviation: 24.42, CV(%): 5.8• Sample 3: n=24, Mean(pg/ml): 714, Standard deviation: 48.55, CV(%): 6.8
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Restrictions:	For Research Use only
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Handling

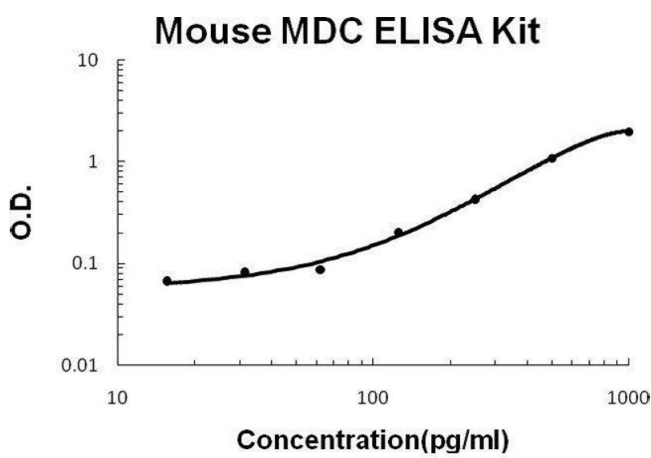
Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C, 4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

Publications

Product cited in: Du, Chen, Wang, Sun: "Pathway analysis of global gene expression change in dendritic cells induced by the polysaccharide from the roots of *Actinidia eriantha*." in: **Journal of ethnopharmacology**, Vol. 214, pp. 141-152, (2018) ([PubMed](#)).

Wen, Xiong, He, Zhang, Du, Liu, Wang, Zhou, Ma: "Fusion cytokine IL-2-GMCSF enhances anticancer immune responses through promoting cell-cell interactions." in: **Journal of translational medicine**, Vol. 14, pp. 41, (2016) ([PubMed](#)).

Images



ELISA

Image 1. Mouse MDC PicoKine ELISA Kit standard curve