Datasheet for ABIN921068

CCL20 ELISA Kit

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Overview

Quantity:	96 tests
Target:	CCL20
Binding Specificity:	AA 27-96
Reactivity:	Rat
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 Rat MIP-3 alpha/CCL20
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: S27-M96
Specificity:	Expression system for standard: E.coli Immunogen sequence: S27-M96
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:	CCL20
Alternative Name:	CCL20 (CCL20 Products)
Background:	Protein Function: Chemotactic factor that attracts lymphocytes and, slightly, neutrophils, but not monocytes (By similarity). May play a role in modulating inflammatory cell recruitment to the CNS and therefore contribute to tissue injury in ischemic stroke and autoimmune diseases. . Background: Macrophage Inflammatory Protein 3alpha(MIP3alpha), also called Chemokine, cc motif, ligand 20(CCL20). The MIP-3alpha/CCL20 gene was cloned and sequenced, revealing a four exon, three intron structure, and was localized by FISH analysis to 2q35-q36. MIP3alpha is predominantly expressed in lymph nodes, appendix, PBL, fetal liver, fetal lung and several cell lines. MIP3alpha/CCL20 and its receptor CCR6 are markedly up-regulated in psoriasis, and they may play a role in the recruitment of T cells to lesional psoriatic skin. And Alanine MIP-3alpha and Serine MIP-3alpha, the two forms of MIP3alpha, that differ by one amino acid at the predicted signal peptide cleavage site. Both of them were chemically synthesized and tested for biological activity. And both flu antigen plus IL-2-activated CD4(+) and CD8(+) T lymphoblasts and cord blood-derived dendritic cells responded to Ser and Ala MIP-3alpha. Synonyms: C-C motif chemokine 20,Beta-chemokine exodus-1,CC chemokine LARC,CC chemokine ST38,Liver and activation-regulated chemokine,Macrophage inflammatory protein 3 alpha,MIP-3-alpha,Small-inducible cytokine A20,Ccl20,Scya20, St38, Full Gene Name: C-C motif chemokine 20 Cellular Localisation: Secreted.
Gene ID:	29538
UniProt:	P97884
Pathways:	The Global Phosphorylation Landscape of SARS-CoV-2 Infection

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: Low levels in thymus and lung.
Plate:	Pre-coated
Protocol:	rat MIP-3 alpha ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for MIP-3 alpha has been precoated onto 96-well plates. Standards(E.coli, S27-M96) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for MIP-3 alpha 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 rat MIP-3 alpha 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 rat MIP-3 alpha 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 rat cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each rat MIP-3 alpha standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 48, Standard deviation: 2.45, CV(%): 5.1 • Sample 2: n=16, Mean(pg/ml): 145, Standard deviation: 6.67, CV(%): 4.6 • Sample 3: n=16, Mean(pg/ml): 273, Standard deviation: 17.2, CV(%): 6.3, • Sample 1: n=24, Mean(pg/ml): 67, Standard deviation: 4.36, CV(%): 6.5 • Sample 2: n=24, Mean(pg/ml): 162, Standard deviation: 8.75, CV(%): 5.4 • Sample 3: n=24, Mean(pg/ml): 294, Standard deviation: 22.05, CV(%): 7.5
Restrictions:	For Research Use only

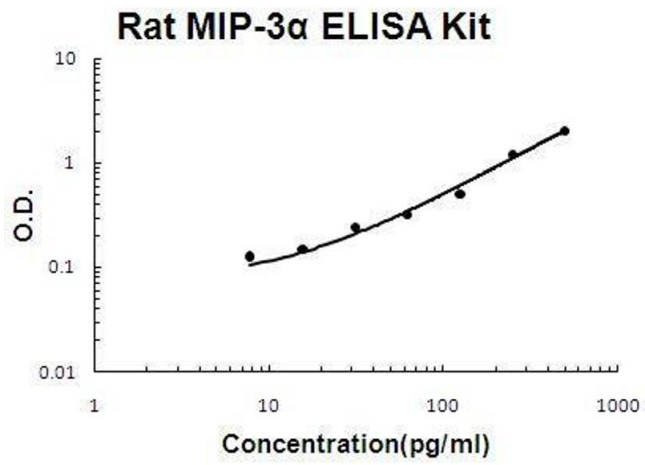
Handling

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:	Romano, Chiaro, Lucarelli, Santarelli, Cucchiara, Guadagnini, Miele, Di Nardo: "Mucosal cytokine profiles in paediatric eosinophilic oesophagitis: A case-control study." in: **Digestive and liver disease : official journal of the Italian Society of Gastroenterology and the Italian Association for the Study of the Liver**, (2014) (PubMed).

Images



ELISA

Image 1. Rat MIP-3 alpha/CCL20 PicoKine ELISA Kit standard curve