Datasheet for ABIN1112608

CX3CL1 ELISA Kit

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Overview

Quantity:	96 tests
Target:	CX3CL1
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	156-10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	For quantitative detection of Fractalkine in mouse serum, plasma, body fluids, tissue lysates or cell culture supernatants.
Sample Type:	Cell Culture Supernatant, Plasma, Serum, Tissue Lysate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	< 10 pg/mL
Components:	1. One 96-well plate pre-coated with anti-mouse fractalkine antibody 2. Lyophilized mouse fractalkine standards: 2 tubes (10ng / tube) 3. Sample / Standard diluent buffer: 30ml 4. Biotin conjugated anti-mouse fractalkine antibody (Concentrated): 130 µl.
Material not included:	1. 37 °C incubator 2. Microplate reader (wavelength: 450nm) 3. Precise pipette and disposable pipette tips 4. Automated plate washer 5. ELISA shaker 6. 1.5ml of Eppendorf tubes 7. Plate cover 8. Absorbent filter papers 9. Plastic or glass container with volume of above 1L

Target Details

Target:	CX3CL1
Alternative Name:	Fractalkine / CX3CL1 (CX3CL1 Products)
Background:	Chemokine (C-X3-C motif) ligand 1 (CX3CL1), also known as fractalkine (in humans) and neurotactin (in mice), is a large cytokine protein of 373 amino acids, it contains multiple domains and is the only known member of the CX3C chemokine family. Its gene is located on human chromosome 16 along with some CC chemokines known as CCL17 and CCL22. CX3CL1 is produced as a long protein (with 373-amino acid in humans) with an extended mucin-like stalk and a chemokine domain on top. The mucin-like stalk permits it to bind to the surface of certain cells. However a soluble (90 kD) version of this chemokine has also been observed. CX3CL1 elicits its adhesive and migratory functions by interacting with the chemokine receptor CX3CR1.
Pathways:	Synaptic Membrane

Application Details

Comment:	This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-fractalkine polyclonal antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-fractalkine polyclonal antibody was used as detection antibodies. The standards test samples and biotin conjugated detection antibody were added - the wells subsequently and wash with wash buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with wash buffer. TMB substrates were used - visualize HRP enzymatic reaction. TMB was catalyzed by HRP - produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional - the fractalkine amount of sample captured in plate. Read the O.D. absorbance at 450 nm in a microplate reader and then the concentration of fractalkine can be calculated.
Plate:	Pre-coated
Reagent Preparation:	1. Before the experiment, centrifuge each kit component for several minutes to bring down all reagents to the bottom of tubes. 2. It is recommend to measure each standard and sample in duplicate. 3. Do NOT let the plate completely dry at any time! Since the dry condition can inactivate the biological material on the plate. 4. Do not reuse pipette tips and tubes to avoid cross contamination. 5. Do not use the expired components and the components from different batches. 6. To avoid the marginal effect of plate incubation for temperature differences (the marginal wells always get stronger reaction), it is recommend to equilibrate the ABC working solution and TMB substrate for at least 30 min at room temperature (37°C) before adding to

Application Details

	wells.The TMB substrate (Kit Component 8) is colorless and transparent before use, if not, please contact us for replacement.
Sample Preparation:	Preparation of sample and reagents 1. Sample Isolate the test samples soon after collecting, then, analyze immediately (within 2 hours). Or aliquot and store at -20 °C for long term. Avoid multiple freeze-thaw cycles. Tissue lysate, body fluids and cell culture supernatants: Centrifuge to remove precipitate, analyze immediately or aliquot and store at -20 °C . Serum: Coagulate the serum at room temperature (about 4 hours). Centrifuge at approximately 2000 × g for 20 min. Analyze the serum immediately or aliquot and store at -20 °C . Plasma: Collect plasma with heparin as the anticoagulant. Centrifuge for 20 min at 2000 x g within 30 min of collection. Analyze immediately or aliquot and store frozen at -20 °C. Citrate and EDTA can not be used as anticoagulant here. Note: 1. Coagulate blood samples completely, then, centrifuge, and avoid hemolysis and particle. 2. NaN3 can not be used as test sample preservative, since it is the inhibitor for HRP.
Restrictions:	For Research Use only

Handling

Preservative:	Sodium azide, Thimerosal (Merthiolate)