Datasheet for ABIN1112579

CXCL1 ELISA Kit

Go to Product page

Overview

Quantity:	96 tests
Target:	CXCL1
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:	For quantitative detection of CXCL1 in mouse serum, plasma, body fluids, tissue lysates or cell culture supernates.
Sample Type:	Cell Culture Supernatant, Plasma, Serum, Tissue Lysate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	< 1 pg/mL
Components:	1. One 96-well plate pre-coated with anti-Mouse CXCL1 antibody 2. Lyophilized Mouse CXCL1 standards: 2 tubes (10ng / tube) 3. Sample / Standard diluent buffer: 30ml 4. Biotin conjugated anti-Mouse CXCL1 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:	CXCL1
Alternative Name:	CXCL1 / GRO-alpha (CXCL1 Products)
Background:	Chemokine (C-X-C motif) ligand 1 (CXCL1), also called GRO1 oncogene, GROJ, KC, Neutrophil-activating protein 3 (NAP-3) and melanoma growth stimulating activity, alpha (MSGA-J), is a small cytokine belonging to the CXC chemokine family . In humans, this protein is encoded by the CXCL1 gene. CXCL1 is secreted by human melanoma cells, has mitogenic properties and is implicated in melanoma pathogenesis. It is expressed by macrophages, neutrophils and epithelial cells, and has neutrophil chemoattractant activity. CXCL1 plays a role in spinal cord development by inhibiting the migration of oligodendrocyte precursors and is involved in the processes of angiogenesis, inflammation, wound healing, and tumorigenesis.
Pathways:	Autophagy

Application Details

Comment:	This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-CXCL1 polyclonal antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-CXCL1 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 CXCL1 amount of sample captured in plate. Read the O.D. absorbance at 450 nm in a microplate reader and then the concentration of CXCL1 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 wells.The TMB substrate (Kit Component 8) is colorless and transparent before use, if not,

Application Details

	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 or cell culture supernate: 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, citrate or EDTA as the anticoagulant. Centrifuge for 30 min at 1000 x g within 30 min of collection. Analyze immediately or aliquot and store frozen at -20 °C. Note: 1. Coagulate blood samples completely, then, centrifuge, and avoid hemolysis and particle. 2. NaN_3 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)