

Mouse CXCL1 ELISA Kit (GRO alpha) ab213859

1 References 1 Image

Overview

Product name Mouse CXCL1 ELISA Kit (GRO alpha)

Detection method Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
1	16	95.7pg/ml	5.84	6.1%
2	16	279pg/ml	12.56	4.5%
3	16	570pg/ml	36.48	6.4%

Inter-assay

Sample	n	Mean	SD	CV%
1	24	101.3pg/ml	7.29	7.2%
2	24	268pg/ml	22.78	8.5%
3	24	605pg/ml	41.14	6.8%

Sample type Cell culture supernatant, Serum

Assay type Sandwich (quantitative)

Sensitivity < 1 pg/ml

Range 15.6 pg/ml - 1000 pg/ml

Assay time 3h 30m

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Mouse

Product overview The Mouse CXCL1 Enzyme-Linked Immunosorbent Assay (ELISA) kit (GRO alpha) (ab213859) is designed for the quantitative detection of Mouse CXCL1 (GRO alpha) in cell culture supernatants and serum.

The ELISA kit is based on standard sandwich enzyme-linked immune-sorbent assay technology.

A monoclonal antibody from rat specific for CXCL1 (GRO alpha) has been precoated onto 96-well plates. Standards (Expression system for standard: E.coli; Immunogen sequence: R20-K96) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CXCL1 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 CXCL1 amount of sample captured in plate.

Notes

Chemokine (C-X-C motif) ligand 1 (CXCL1) is a small cytokine belonging to the CXC chemokine family that was previously called GRO1 oncogene, GRO alpha, KC, Neutrophil-activating protein 3 (NAP-3) and melanoma growth stimulating activity, alpha (MSGA-alpha). In humans, this protein is encoded by the CXCL1 gene. The gene for CXCL1 is located on human chromosome 4 amongst genes for other CXC chemokines. The mature form of CXCL1 is maximally 73 amino acids long. CXCL1 is secreted by human melanoma cells, has mitogenic properties and is implicated in melanoma pathogenesis. CXCL1 is expressed by macrophages, neutrophils and epithelial cells, and has neutrophil chemoattractant activity. This chemokine elicits its effects by signaling through the chemokine receptor CXCR2. CXCL1 decreased the severity of multiple sclerosis and may offer a neuroprotective function.

Platform Pre-coated microplate (12 x 8 well strips)

Properties

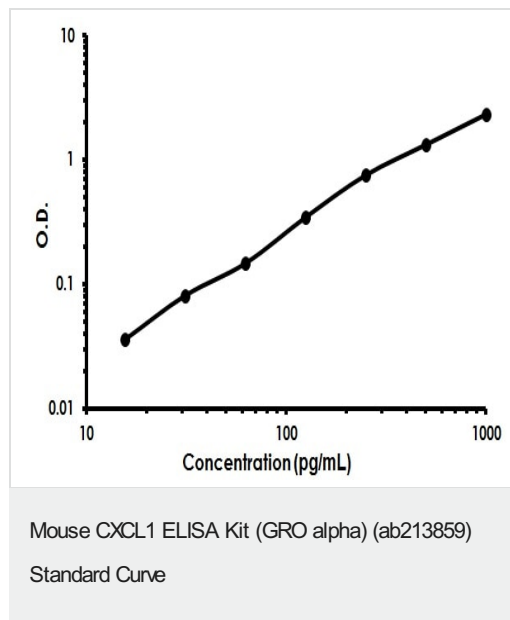
Storage instructions Store at -20°C. Please refer to protocols.

Components	Identifier	1 x 96 tests
ABC Diluent Buffer	Blue Cap	1 x 12ml
Adhesive Plate Seal		4 units
Antibody Diluent Buffer	Green Cap	1 x 12ml
Anti-Mouse CXCL1 coated Microplate (12 x 8 wells)		1 unit
Avidin-Biotin-Peroxidase Complex (ABC)		1 x 100µl
Biotinylated anti- Mouse CXCL1 antibody		1 x 100µl
Lyophilized recombinant Mouse CXCL1 standard		2 vials
Sample Diluent Buffer	Green Cap	1 x 30ml
TMB Color Developing Agent	Black Cap	1 x 10ml
TMB Stop Solution	Yellow Cap	1 x 10ml
Wash Buffer (25X)		1 x 20ml

Function Has chemotactic activity for neutrophils. May play a role in inflammation and exerts its effects on endothelial cells in an autocrine fashion. In vitro, the processed forms GRO-alpha(4-73), GRO-

	alpha(5-73) and GRO-alpha(6-73) show a 30-fold higher chemotactic activity.
Sequence similarities	Belongs to the intercrine alpha (chemokine CxC) family.
Post-translational modifications	N-terminal processed forms GRO-alpha(4-73), GRO-alpha(5-73) and GRO-alpha(6-73) are produced by proteolytic cleavage after secretion from peripheral blood monocytes.
Cellular localization	Secreted.

Images



Mouse CXCL1 ELISA Kit (GRO alpha) (ab213859) Standard Curve

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors