abcam

Product datasheet

Mouse CXCL16 ELISA Kit ab197744

Recombinant SimpleStepELISA

1 References 8 Images

Overview

Product name Mouse CXCL16 ELISA Kit

Detection method Colorimetric

Precision Intra-assav

Sample	n	Mean	SD	CV%
RAW 264.7	5			6.3%

Inter-assay

Sample	n	Mean	SD	CV%
RAW 264.7	3			3.2%

Sample type Cell culture supernatant, Serum, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 7.6 pg/ml

31.25 pg/ml - 2000 pg/ml Range

Recovery Sample specific recovery

Sample type	Average %	Range
Serum	99.9	84.8% - 112.5%
Cell culture media	96.7	86% - 108.3%
Cit plasma	90.5	84.2% - 95.8%

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Mouse

Does not react with: Goat, Cow, Pig

Product overview Mouse CXCL16 ELISA Kit (ab197744) is a single-wash 90 min sandwich ELISA designed for the

quantitative measurement of CXCL16 protein in cell culture supernatant, cit plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse CXCL16 with 7.6 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

CXCL16 is a chemokine. It induces a strong chemotactic response. It induces calcium mobilization. CXCL16 binds to CXCR6/Bonzo. CXCL16 also acts as a scavenger receptor on macrophages, which specifically binds to oxidized low density lipoprotein, suggesting that it may be involved in pathophysiology such as atherogenesis. CXCL16 is a plasma membrane protein.

Microplate (12 x 8 well strips)

Notes

Platform

Properties

Storage instructions

Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Mouse CXCL16 Capture Antibody	1 x 600µl
10X Mouse CXCL16 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Mouse CXCL16 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent 25BS	1 x 20ml
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml

Components	1 x 96 tests
TMB Development Solution	1 x 12ml

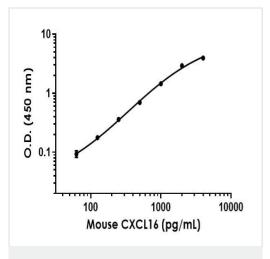
Relevance

CXCL16 acts as a scavenger receptor on macrophages, which specifically binds to OxLDL (oxidized low density lipoprotein), suggesting that it may be involved in pathophysiology such as atherogenesis. It induces a strong chemotactic response and calcium mobilization. It binds to CXCR6/Bonzo.

Cellular localization

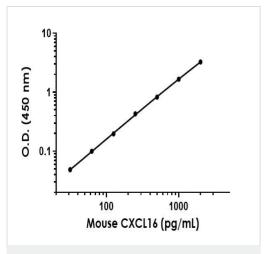
Cell Membrane and Secreted

Images



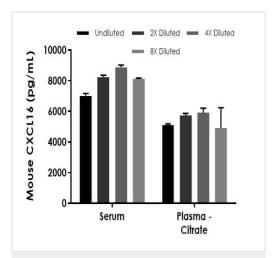
Example of CXCL16 standard curve prepared in Sample Diluent 25BS.

Background-subtracted data values (mean +/- SD) are graphed.



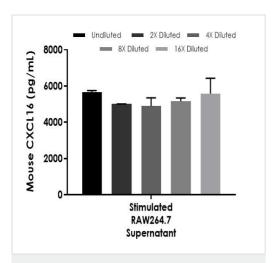
Example of CXCL16 standard curve prepared in Sample Diluent NS.

Background-subtracted data values (mean +/- SD) are graphed.



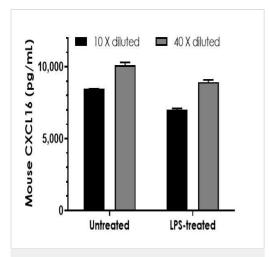
Interpolated concentrations of native CXCL16 in mouse serum and plasma (citrate) samples.

The concentrations of CXCL16 were measured in duplicates, interpolated from the CXCL16 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 10% and plasma (citrate) 10%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



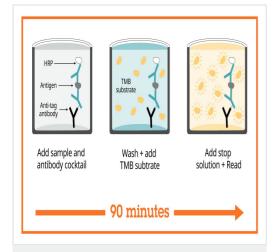
Interpolated concentrations of native CXCL16 in mouse LPS-treated RAW264.7 supernatant samples.

RAW 264.7 cells were 24 hour serum starved and continued to culture in the presence of 5 μ g/mL lipopolysaccharides (LPS) for 48 hours. The concentrations of CXCL16 were measured in duplicates, interpolated from the CXCL16 standard curves and corrected for sample dilution. Undiluted samples are as follows: RAW264.7 supernatant 20%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



CXCL16 concentrations in unstimulated and LPSstimulated RAW 264.7 cell culture supernatants.

RAW 264.7 cells were 24 hour serum starved and continued to culture either in the absence or in the presence of 5 μ g/mL lipopolysaccharides (LPS) for 48 hours. Two dilutions (as indicated) of the cell culture supernatant samples were analyzed with this kit. Interpolated concentrations of CXCL16 adjusted for sample dilution are graphed in pg of CXCL16 per mL of supernatant (mean +/- SD, n = 2).



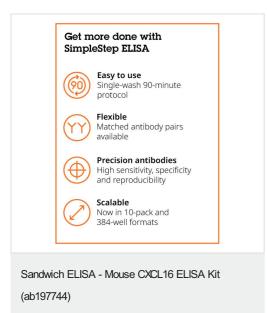
Sandwich ELISA - Mouse CXCL16 ELISA Kit (ab197744)

SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



Sandwich ELISA - Mouse CXCL16 ELISA Kit (ab197744)

To learn more about the advantages of recombinant antibodies see **here**.



To learn more about the advantages of SimpleStep $\mathsf{ELISA}^{@}$ kits see $\underline{\mathsf{here}}$.

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