# abcam

### Product datasheet

## Mouse CXCL9 ELISA Kit ab203364

Recombinant SimpleStepELISA

**6 References** 8 Images

Overview

**Product name** 

Mouse CXCL9 ELISA Kit

**Detection method** 

Colorimetric

Precision

Intra-assay

| Sample  | n | Mean | SD | CV%  |  |
|---------|---|------|----|------|--|
| Overall | 5 |      |    | 7.6% |  |

Inter-assay

| Sample  | n | Mean | SD | CV%  |
|---------|---|------|----|------|
| Overall | 3 |      |    | 7.5% |

Sample type Cell culture supernatant, Serum, Cell culture extracts, Tissue Extracts, Hep Plasma, EDTA

Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 1.4 pg/ml

6.25 pg/ml - 400 pg/ml Range

Recovery Sample specific recovery

| Sample type        | Average % | Range           |
|--------------------|-----------|-----------------|
| Serum              | 133.7     | 119.4% - 144%   |
| Cell culture media | 101.1     | 95.3% - 106%    |
| Hep Plasma         | 87.9      | 87.8% - 88.1%   |
| EDTA Plasma        | 115.2     | 108.3% - 125.6% |
| Cit plasma         | 104       | 95.9% - 109.2%  |

Assay time 1h 30m

**Assay duration** 

One step assay

Species reactivity

Reacts with: Mouse

Does not react with: Cow, Pig

**Product overview** 

Mouse CXCL9 ELISA Kit (ab203364) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CXCL9 protein in cell culture extracts, cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse CXCL9 with 1.4 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.

**Notes** 

MIG (Monokine Induced by Gamma interferon) is a small cytokine belonging to the CXC motif chemokine family, thus named CXC motif chemokine family ligand 9 (CXCL9). CXCL9 is a cytokine that affects the growth, movement, or activation state of cells that participate in immune and inflammatory response. CXCL9 is a T-cell chemoattractant, which is induced by IFN-y.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

**Platform** 

Microplate (12 x 8 well strips)

#### **Properties**

#### Storage instructions

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

| Components                                       | 1 x 96 tests |
|--------------------------------------------------|--------------|
| 10X Mouse CXCL9 Capture Antibody                 | 1 x 600µl    |
| 10X Mouse CXCL9 Detector Antibody                | 1 x 600µl    |
| 10X Wash Buffer PT (ab206977)                    | 1 x 20ml     |
| 50X Cell Extraction Enhancer Solution (ab193971) | 1 x 1ml      |
| 5X Cell Extraction Buffer PTR (ab193970)         | 1 x 10ml     |
|                                                  | ·            |

| Components                                          | 1 x 96 tests |
|-----------------------------------------------------|--------------|
| Antibody Diluent CPI - HAMA Blocker (ab193969)      | 1 x 6ml      |
| Mouse CXCL9 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     |
| TMB Development Solution                            | 1 x 12ml     |

**Function** 

Cytokine that affects the growth, movement, or activation state of cells that participate in immune and inflammatory response. Chemotactic for activated T-cells. Binds to CXCR3.

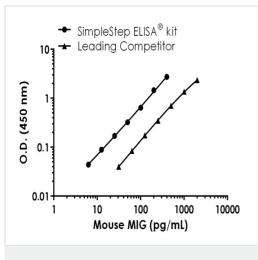
Sequence similarities

Belongs to the intercrine alpha (chemokine CxC) family.

**Cellular localization** 

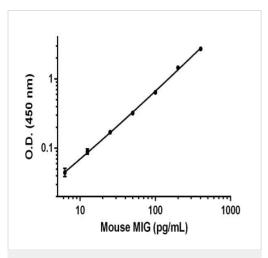
Secreted.

#### **Images**

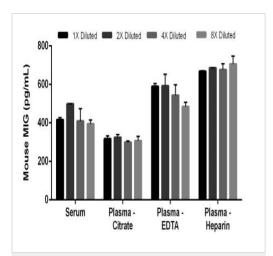


Mouse MIG (CXCL9) standard curve comparison data.

Standard curve comparison between mouse MIG (CSCL9) SimpleStep ELISA $^{\circledR}$  kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows a 4-fold increase in sensitivity.



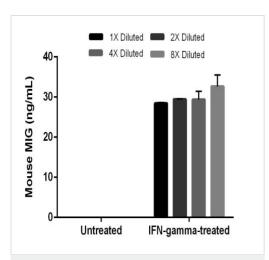
Example of MIG standard curve prepared in Sample Diluent NS.



Interpolated concentrations of MIG in mouse serum and plasma samples.

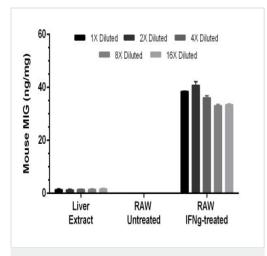
Background-subtracted data values (mean +/- SD) are graphed.

The concentrations of MIG were measured in duplicates, interpolated from the MIG standard curve and corrected for sample dilution. Note that 1X Diluted serum and plasma (citrate and EDTA) samples were pre-diluted to 50%. Note that 1X Diluted plasma (heparin) samples were pre-diluted to 25%. The interpolated, dilution factor-corrected values are plotted in pg of MIG per mL of neat sample (mean +/- SD, n=2).



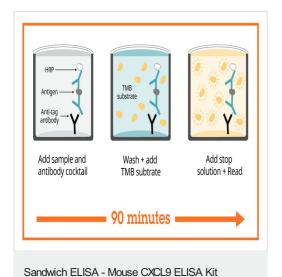
IFN-gamma treatment of Raw 264.7 cell induces secretion of MIG.

Raw 264.7 cells were cultured in the absence or presence of 500 ng/mL mouse recombinant Interferon-gamma protein for 72 hours. The cell culture supernatant samples were collected. The concentrations of MIG were measured in the diluted supernatants in duplicates, interpolated from the MIG standard curve and corrected for sample dilution. Note that 1X Diluted supernatant samples were pre-diluted to 2%. The interpolated, dilution factor-corrected values are plotted in ng of MIG per mL of neat sample (mean +/- SD, n=2).



IFN-gamma treatment of Raw 264.7 cell induces expression of MIG.

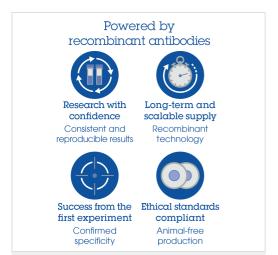
Raw 264.7 cells were cultured in the absence or presence of 500 ng/mL Mouse recombinant Interferon-gamma protein for 72 hours. The concentrations of MIG were measured in diluted extracts of these cells and of Mouse liver in duplicates, interpolated from the MIG standard curve and corrected for sample dilution. Note that 1X Diluted Raw 264.7 cells extract samples were at 25  $\mu$ g/mL. Note that 1X Diluted Mouse liver extract samples were at 500  $\mu$ g/mL. The interpolated, dilution factor-corrected values are plotted in ng of MIG per mg of total protein (mean +/- SD, n=2).



(ab203364)

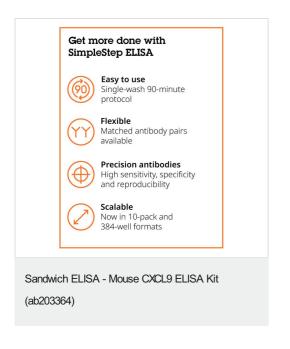
(ab203364)

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 CXCL9 ELISA Kit

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



To learn more about the advantages of SimpleStep ELISA<sup>®</sup> kits see **here**.

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