# abcam

## Product datasheet

# Mouse MIP1b ELISA Kit ab215115

Recombinant SimpleStep ELISA

### 7 Images

#### Overview

**Product name** 

Mouse MIP1b ELISA Kit

**Detection method** 

Colorimetric

**Precision** 

Sample	n	Mean	SD	CV%
Overall	5			5%

Inter-assay

Intra-assay

Sample	n	Mean	SD	CV%
Overall	3			2.2%

Sample type Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 2.1 pg/ml

5 pg/ml - 350 pg/ml Range

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	111	105% - 117%
Serum	101	94% - 110%
Hep Plasma	81	76% - 89%
EDTA Plasma	90	87% - 93%
Cit plasma	81	77% - 84%

Assay time 1h 30m

**Assay duration** One step assay

#### Species reactivity

Reacts with: Mouse

Does not react with: Cow

**Product overview** 

Mouse MIP1b ELISA Kit (ab215115) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of MIP1b protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate

Mouse MIP1b with 2.1 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** 

MIP1b (CCL4) is a 7.8 kDa protein member of the CC subfamily of chemokines. MIP1b is induced in a variety of cells, including mast cells, CD8+ T cells, intra-epithelial gamma-delta T cells, endothelial cells, and macrophages. MIP1b is involved in the recruitment of T cells to lymph nodes and can enhance macrophage effector functions.

**Platform** 

Pre-coated microplate (12 x 8 well strips)

#### **Properties**

#### Storage instructions

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

Components	1 x 96 tests
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 5BI	1 x 6ml
10X Mouse MIP1b Capture Antibody	1 x 600µl
10X Mouse MIP1b Detector Antibody	1 x 600µl
Mouse MIP1b Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit

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

**Function** Monokine with inflammatory and chemokinetic properties. Binds to CCR5. One of the major HIV-

> suppressive factors produced by CD8+ T-cells. Recombinant MIP-1-beta induces a dosedependent inhibition of different strains of HIV-1, HIV-2, and simian immunodeficiency virus (SIV). The processed form MIP-1-beta(3-69) retains the abilities to induce down-modulation of surface expression of the chemokine receptor CCR5 and to inhibit the CCR5-mediated entry of HIV-1 in

T-cells. MIP-1-beta(3-69) is also a ligand for CCR1 and CCR2 isoform B.

Sequence similarities Belongs to the intercrine beta (chemokine CC) family.

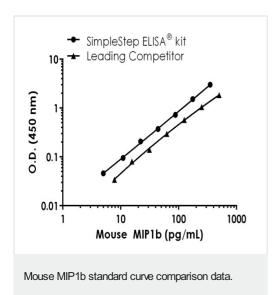
Post-translational N-terminal processed form MIP-1-beta(3-69) is produced by proteolytic cleavage after secretion

modifications

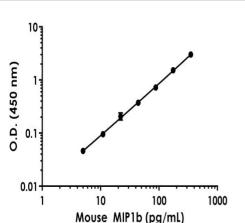
from peripheral blood lymphocytes.

**Cellular localization** Secreted.

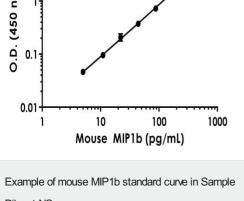
#### **Images**

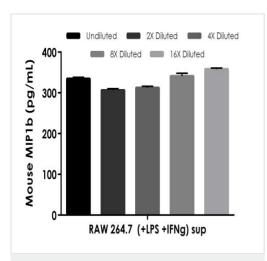


Standard curve comparison between mouse MIP1b SimpleStep ELISA® kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows a 0.5-fold increase in sensitivity.

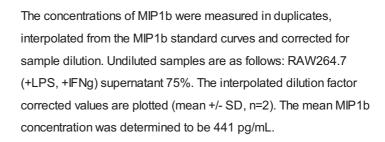


Diluent NS.

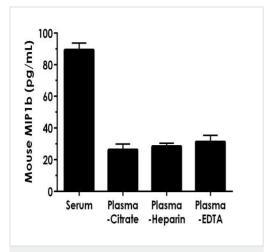




Interpolated concentrations of native MIP1b in cell culture supernatant sample.

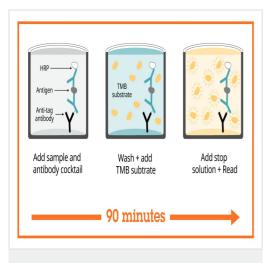


Background-subtracted data values (mean +/- SD) are graphed.



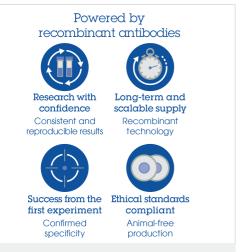
Native pooled mouse serum and plasma signal was measured in duplicate.

Interpolated dilution factor corrected values are plotted (mean +/-SD, n=2). The mean MIP1b concentration was determined to be 89 pg/m/l in serum, 26 pg/mL in plasma (citrate), 28 pg/mL in plasma (heparin), 31 pg/mL in plasma (EDTA).



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 MIP1b ELISA Kit (ab215115)



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(ab215115)

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



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

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