

Product datasheet

Mouse MCP1 ELISA Kit ab208979

Recombinant SimpleStep ELISA

★★★★★ 2 Abreviews 14 References 6 Images

Overview

Product name	Mouse MCP1 ELISA Kit				
Detection method	Colorimetric				
Precision	Intra-assay				
	Sample	n	Mean	SD	CV%
	Mouse serum	8			4.4%
	Inter-assay				
	Sample	n	Mean	SD	CV%
	Mouse serum	3			9.9%
Sample type	Cell culture supernatant, Serum, EDTA Plasma, Cit plasma				
Assay type	Sandwich (quantitative)				
Sensitivity	0.487 pg/ml				
Range	1.56 pg/ml - 100 pg/ml				
Recovery	Sample specific recovery				
	Sample type		Average %		Range
	Cell culture supernatant		98		91% - 107%
	Serum		105		101% - 112%
	Hep Plasma		105		103% - 108%
	EDTA Plasma		106		104% - 110%
	Cit plasma		104		100% - 111%
Assay time	1h 30m				
Assay duration	One step assay				

**Species reactivity****Reacts with:** Mouse**Does not react with:** Goat, Cow, Pig**Product overview**

Mouse MCP1 ELISA Kit (ab208979) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of MCP1 protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse MCP1 with 0.487 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 (**ab203359**) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

**Notes**

MCP1 (CCL2) is a chemokine expressed by fibroblasts, macrophages, endothelial cells, mast cells, osteoblasts, ameloblasts, epithelial cells, and astrocytes after stimulation with inflammatory stimuli. MCP1 is involved in the recruitment of monocytes and lymphocytes and in the regulation of Th1/Th2 lymphocyte differentiation.

The standard is affinity purified.

**Platform**

Microplate (12 x 8 well strips)

**Properties****Storage instructions**

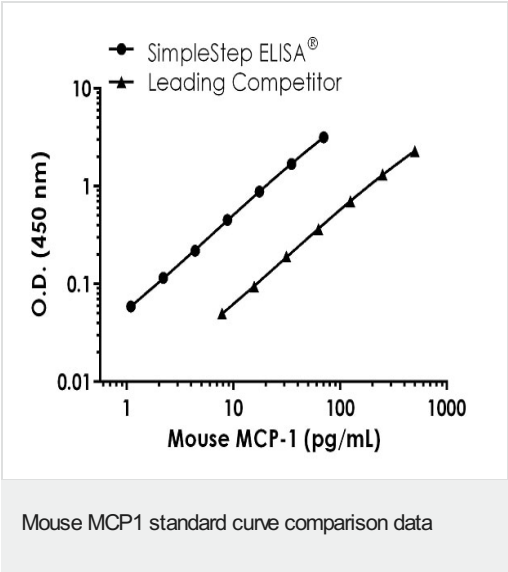
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests	10 x 96 tests	1 x 384 tests
10X Mouse MCP1 Capture Antibody	1 x 600µl	1 x 6000µl	1 x 600µl
10X Mouse MCP1 Detector Antibody	1 x 600µl	1 x 6000µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 200ml	1 x 20ml
384 well CaptSure™ microplates	0 x 0 unit	0 x 0 unit	1 unit
Antibody Diluent 5BI	1 x 6ml	10 x 6ml	1 x 6ml
Mouse MCP1 Lyophilized Recombinant Protein (ab9901)	2 vials	10 vials	2 vials
Plate Seals	1 unit	10 units	1 unit

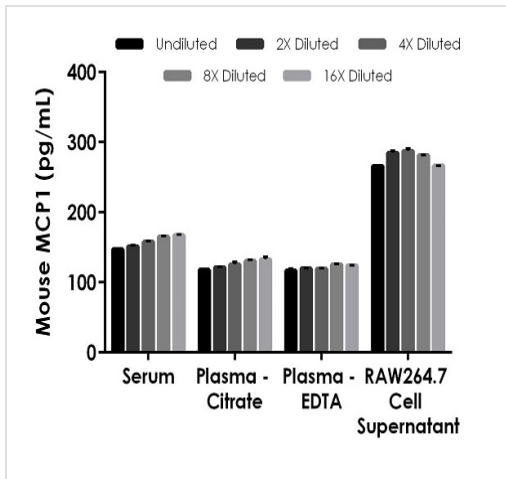
Components	1 x 96 tests	10 x 96 tests	1 x 384 tests
Sample Diluent NS (ab193972)	1 x 50ml	2 x 250ml	1 x 250ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 x 10 units	0 x 0 unit
Stop Solution	1 x 12ml	1 x 120ml	2 x 12ml
TMB Development Solution	1 x 12ml	1 x 120ml	2 x 12ml

Function	Chemotactic factor that attracts monocytes and basophils but not neutrophils or eosinophils. Augments monocyte anti-tumor activity. Has been implicated in the pathogenesis of diseases characterized by monocytic infiltrates, like psoriasis, rheumatoid arthritis or atherosclerosis. May be involved in the recruitment of monocytes into the arterial wall during the disease process of atherosclerosis.
Sequence similarities	Belongs to the intercrine beta (chemokine CC) family.
Post-translational modifications	Processing at the N-terminus can regulate receptor and target cell selectivity. Deletion of the N-terminal residue converts it from an activator of basophil to an eosinophil chemoattractant.
Cellular localization	Secreted.

Images

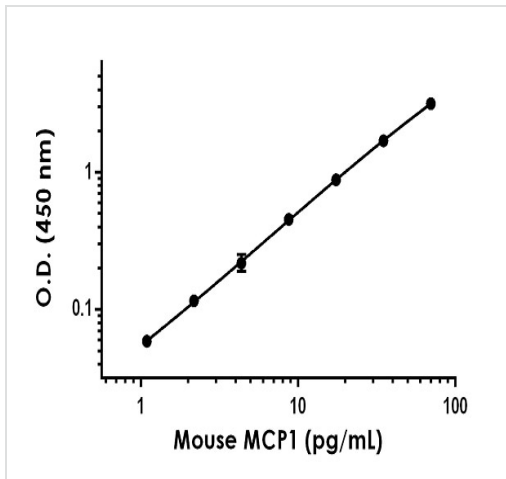


Standard curve comparison between mouse MCP1 SimpleStep ELISA<sup>®</sup> kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows a 3-fold increase in sensitivity.



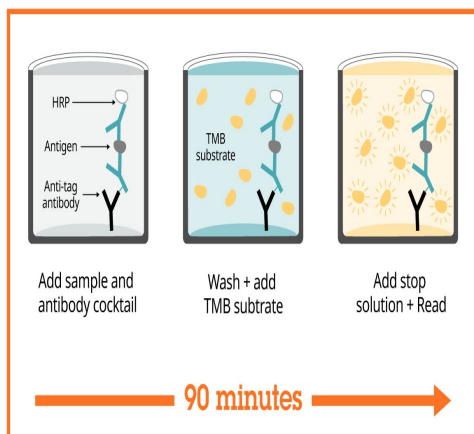
Interpolated concentrations of native MCP1 in mouse serum, plasma and cell culture supernatant samples.

The concentrations of MCP1 were measured in duplicates, interpolated from the MCP1 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 25%, plasma (citrate) 25%, plasma (EDTA) 25%, and RAW264.7 cell culture supernatant 10%. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD,  $n=2$ ). The mean MCP1 concentration was determined to be 157.7 pg/mL in serum, 125.7 pg/mL in plasma (citrate), 121.1 pg/mL in plasma (EDTA), and 277.2 pg/mL in RAW264.7 cell culture supernatant.



Example of mouse MCP1 standard curve in Sample Diluent NS.

Background-subtracted data values (mean  $\pm$  SD) are graphed.



Sandwich ELISA - Mouse MCP1 ELISA Kit  
(ab208979)

SimpleStep ELISA technology allows the formation of the antibody-antigen 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.

Powered by  
recombinant antibodies



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Sandwich ELISA - Mouse MCP1 ELISA Kit  
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To learn more about the advantages of recombinant antibodies see [here](#).

**Get more done with  
SimpleStep ELISA**



**Easy to use**  
Single-wash 90-minute  
protocol



**Flexible**  
Matched antibody pairs  
available



**Precision antibodies**  
High sensitivity, specificity  
and reproducibility



**Scalable**  
Now in 10-pack and  
384-well formats

Sandwich ELISA - Mouse MCP1 ELISA Kit  
(ab208979)

To learn more about the advantages of SimpleStep ELISA® kits  
see [here](#).

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

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