

Mouse Chemerin ELISA Kit ab204520

Recombinant SimpleStep ELISA[®]

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Overview

Product name	Mouse Chemerin ELISA Kit				
Detection method	Colorimetric				
Precision	Intra-assay				
	Sample	n	Mean	SD	CV%
	Mouse serum	8			1.78%
	Inter-assay				
	Sample	n	Mean	SD	CV%
	Mouse serum	3			2.49%
Sample type	Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma				
Assay type	Sandwich (quantitative)				
Sensitivity	1.75 pg/ml				
Range	14.06 pg/ml - 900 pg/ml				
Recovery	Sample specific recovery				
	Sample type	Average %		Range	
	Serum	95		86% - 101%	
	Cell culture media	100		96% - 102%	
	Hep Plasma	102		100% - 106%	
	EDTA Plasma	112		105% - 118%	
	Cit plasma	92		92% - 93%	
Assay time	1h 30m				
Assay duration	One step assay				

Species reactivity

Reacts with: Mouse

Does not react with: Goat, Cow, Pig

Product overview

Mouse Chemerin ELISA Kit (ab204520) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Chemerin protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Chemerin with 1.75 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

Mouse Chemerin (also known as retinoic acid receptor responder protein 2, or Rarres2) is an adipocyte-secreted protein (adipokine) that regulates adipogenesis, metabolism and inflammation through activation of the chemokine-like receptor 1 (CMKLR1). Its other ligands include G protein-coupled receptor 1 (GPR1) and chemokine receptor-like 2 (CCRL2). Chemerin positively regulates adipocyte differentiation, modulates the expression of adipocyte genes involved in lipid and glucose metabolism and might play a role in angiogenesis, a process essential for the expansion of white adipose tissue. Furthermore, Chemerin also acts as a proinflammatory adipokine, causing an increase in secretion of proinflammatory and prodiabetic adipokines.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions

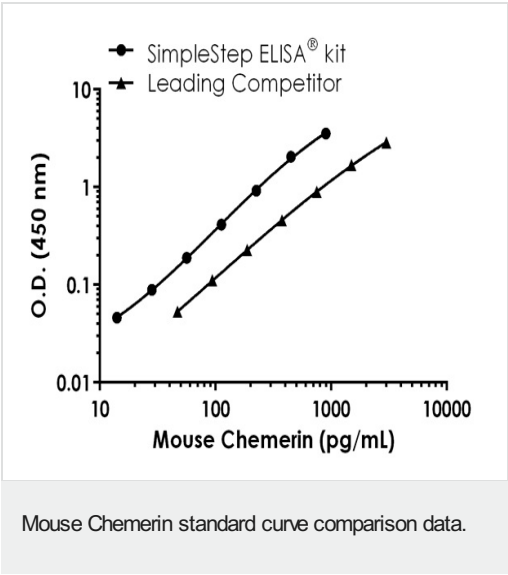
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Mouse Chemerin Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Mouse Chemerin Capture Antibody(Lyophilized)	1 vial
Mouse Chemerin Lyophilized Recombinant Protein	2 vials

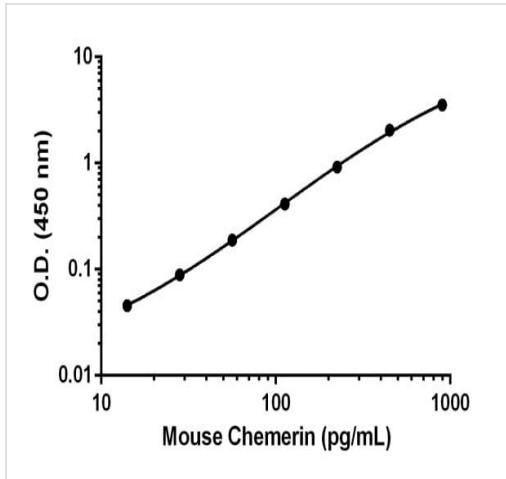
Components	1 x 96 tests
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Relevance	This gene encodes a secreted chemotactic protein that initiates chemotaxis via the ChemR23 G protein-coupled seven-transmembrane domain ligand. Expression of this gene is upregulated by the synthetic retinoid tazarotene and occurs in a wide variety of tissues. The active protein has several roles, including that as an adipokine, and is truncated on both termini from the proprotein.
Cellular localization	Secreted

Images

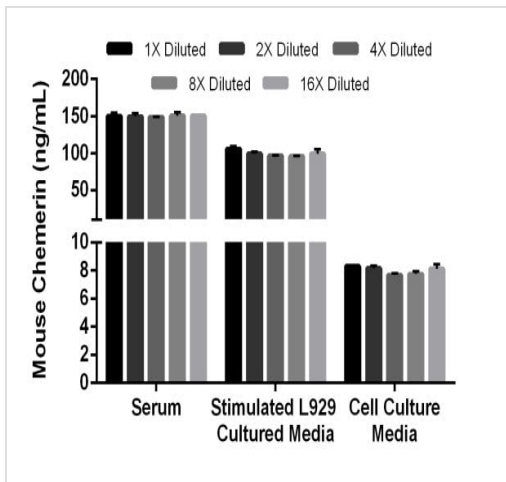


Standard curve comparison between mouse Chemerin SimpleStep ELISA[®] kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows comparable sensitivity.



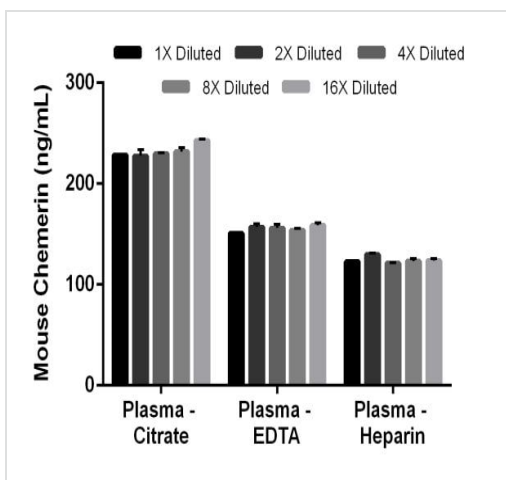
Example of the mouse Chemerin standard curve diluted in Sample Diluent NS.

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



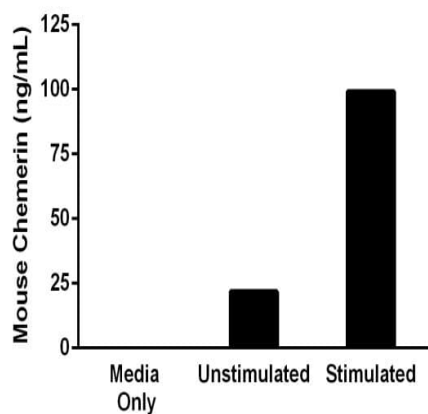
Linearity of dilution of mouse Chemerin in serum, stimulated L292 cultured media, and cell culture media.

Native mouse Chemerin was measured in 0.5% mouse serum and 0.66% PHA + PMA stimulated L929 cultured media that were diluted in a 2-fold dilution series in Sample Diluent NS. Recombinant mouse Chemerin was spiked into 10% cell culture media and diluted in a 2-fold dilution series in Sample Diluent NS. The concentrations of mouse Chemerin were measured in duplicate and interpolated from the mouse Chemerin standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are graphed (mean \pm SD).



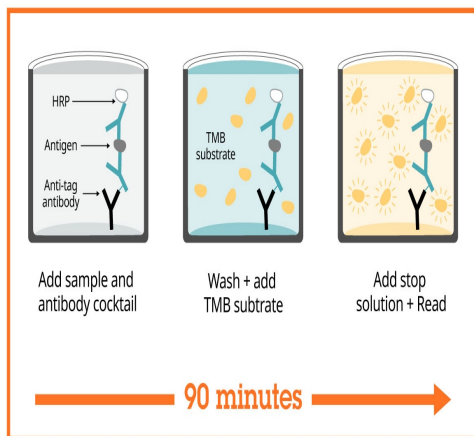
Linearity of dilution of mouse Chemerin in plasma samples.

Native mouse Chemerin was measured in 0.33% mouse plasma citrate, 0.5% mouse plasma EDTA and 0.66% mouse plasma heparin that were diluted in a 2-fold dilution series in Sample Diluent NS. The concentrations of mouse Chemerin were measured in duplicate and interpolated from the mouse Chemerin standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are graphed (mean \pm SD).



Mouse Chemerin expression in L929 cells cultured in MEM with 10% horse serum and 100 µg/mL of Kanamycin.

During the exponential growth phase, L929 cells were treated for 72 hours in the presence and absence of 1.5% PHA and 10 ng/mL of PMA. Samples were diluted 1:300 in Sample Diluent NS. The concentrations of mouse Chemerin were interpolated from a standard curve diluted in Sample Diluent NS and corrected for sample dilution. The interpolated dilution factor corrected values are graphed (mean +/- SD). Note that media only gave an O.D. equivalent to background.



Sandwich ELISA - Mouse Chemerin ELISA Kit (ab204520)

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 Chemerin ELISA Kit
(ab204520)

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 Chemerin ELISA Kit
(ab204520)

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

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