

Product datasheet

Rat CCL4 ELISA Kit ab240680

Recombinant SimpleStep ELISA[®]

[6 Images](#)

Overview

Product name Rat CCL4 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
spleen	8			5.8%

Inter-assay

Sample	n	Mean	SD	CV%
spleen	3			7.1%

Sample type

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

Assay type

Sandwich (quantitative)

Sensitivity

6.9 pg/ml

Range

11.7 pg/ml - 750 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	98	95% - 100%
Serum	90	83% - 94%
Hep Plasma	94	90% - 98%
EDTA Plasma	96	88% - 101%
Cit plasma	99	92% - 106%

Assay time

1h 30m

Assay duration

One step assay

Species reactivity**Reacts with:** Rat**Product overview**

Rat CCL4 ELISA Kit (ab240680) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CCL4 protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Rat CCL4 with 6.9 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.

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 Rat CCL4 Capture Antibody	1 x 600µl
10X Rat CCL4 Detector Antibody	2 vials
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BR	1 x 6ml
Plate Seals	1 unit
Rat CCL4 Lyophilized Recombinant Protein	2 vials
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

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 dose-

dependent 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.

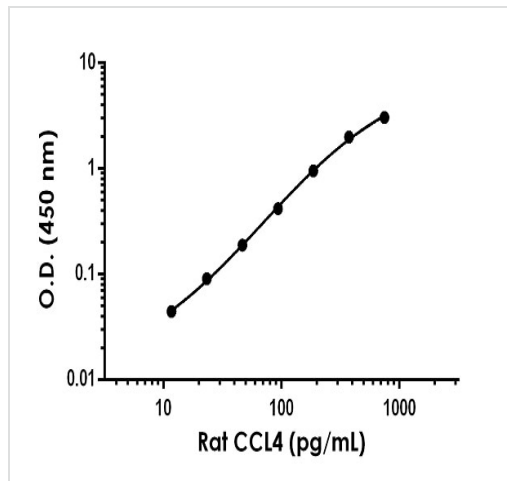
Post-translational modifications

N-terminal processed form MIP-1-beta(3-69) is produced by proteolytic cleavage after secretion from peripheral blood lymphocytes.

Cellular localization

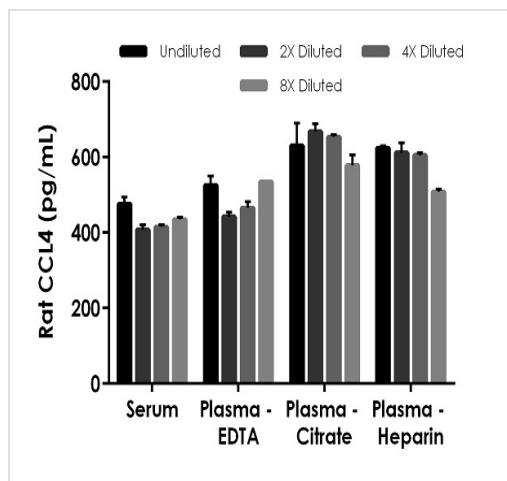
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Images



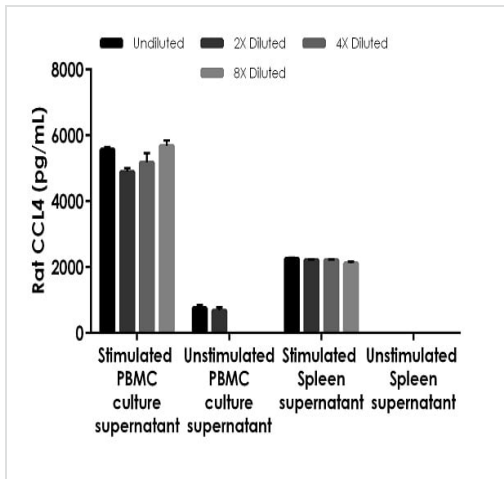
The CCL4 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

Example of rat CCL4 standard curve in Sample Diluent NS.



The concentrations of CCL4 were measured in duplicates, interpolated from the CCL4 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 25%, plasma (citrate) 50%, plasma (heparin) 50% and plasma (EDTA) 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).

Interpolated concentrations of spiked CCL4 in rat serum and plasma samples.



Interpolated concentrations of CCL4 in rat stimulated PBMC and spleen samples.

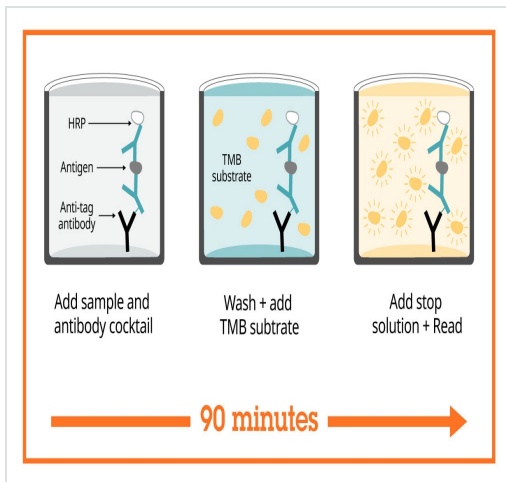
Rat PBMCs were cultured in RPMI supplemented with 10% fetal calf serum. Cells were cultured for days in the presence or absence of PHA. Rat Spleen was cultured in the presence or absence of PHA and rat IL2 for 6 days. The concentrations of CCL4 were measured in duplicate and interpolated from the CCL4 standard curve and corrected for sample dilution. Undiluted samples are as follows: 3% PBMC culture supernatant and 25% spleen culture supernatant. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CCL4 concentration was determined to be 5,330 pg/mL in stimulated PBMC, 720 pg/mL in unstimulated PBMC, and 2,051 pg/mL in stimulated spleen.

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 - Rat CCL4 ELISA Kit (ab240680)





To learn more about the advantages of recombinant antibodies see [here](#).



Sandwich ELISA - Rat CCL4 ELISA Kit (ab240680)

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.

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 - Rat CCL4 ELISA Kit (ab240680)

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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