abcam

Product datasheet

Mouse CCL28 ELISA Kit ab210578

Recombinant SimpleStep ELISA

8 Images

Overview

Product name

Mouse CCL28 ELISA Kit

Detection method

Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Saliva	8			2.6%

Inter-assay

Sample	n	Mean	SD	CV%
Saliva	3			6.9%

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

Assay type Sandwich (quantitative)

Sensitivity 4.7 pg/ml

62.5 pg/ml - 4000 pg/ml Range

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	116	115% - 118%
Serum	111	99% - 118%
Hep Plasma	99	96% - 100%
EDTA Plasma	109	105% - 112%
Cit plasma	99	94% - 105%

Assay time 1h 30m

Assay duration One step assay

Species reactivity

Reacts with: Mouse

Does not react with: Rat, Human

Product overview

Mouse CCL28 ELISA Kit (ab210578) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CCL28 protein in cell culture extracts, cell culture supernatant, plasma, serum, and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse CCL28 with 4.7 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.

Mouse CCL28 is a member of the CC subfamily of chemokines. Mucosal epithelial cells such as exocrine glands, trachea, and colon express mouse CCL28 protein. In lower levels, mouse CCL28 is also found in brain, spleen and lung tissues. CCL28 chemoattracts resting CD4 and CD8 cells, as well as IgA antibody secreting cells. Furthermore, CCL28 plays a role in extravasation of IgA antibody secreting cells in the small intestine, colon, and lactating mammary gland. Human and mouse CCL28 share an overall 66% amino acid sequence identity, with an 83% amino acid sequence identity in their mature regions.

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

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 CCL28 Capture Antibody	1 x 600µl
10X Mouse CCL28 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
	'

Notes

Components	1 x 96 tests
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 5BI	1 x 6ml
Mouse CCL28 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NBP	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

Chemotactic activity for resting CD4, CD8 T-cells and eosinophils. Binds to CCR3 and CCR10

and induces calcium mobilization in a dose-dependent manner.

Tissue specificity

Preferentially expressed by epithelial cells of diverse tissues including normal and pathological colon, salivary gland, mammary gland, trachea and rectum. Also found in prostate, spleen, thyroid, psoriasis skin and in lower levels in peripheral blood leukocytes, small intestine, Peyer patches,

stomach and normal skin.

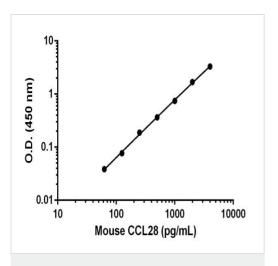
Sequence similarities

Belongs to the intercrine beta (chemokine CC) family.

Cellular localization

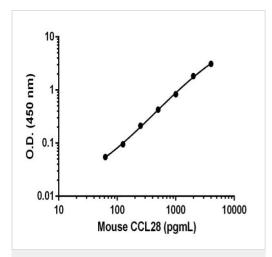
Secreted.

Images

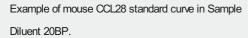


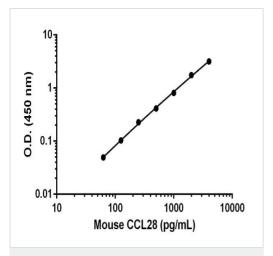
Example of mouse CCL28 standard curve in Sample Diluent NS.

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



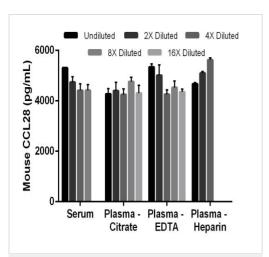
Background-subtracted data values (mean +/- SD) are graphed.





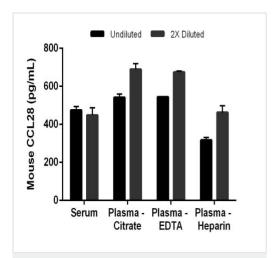
Example of mouse CCL28 standard curve in Sample Diluent 1X Cell Extraction Buffer PTR.

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



Interpolated concentrations of spiked CCL28 in mouse serum and plasma samples.

The concentrations of CCL28 were measured in duplicates, interpolated from the CCL28 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 50%, plasma (citrate) 50%, plasma (EDTA) 50%, and plasma (heparin) 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CCL28 concentration was determined to be 4,718.7 pg/mL in serum, 4,395.5 pg/mL in plasma (citrate), 4,697.8 pg/mL in plasma (EDTA) and 5,130.8 pg/mL in plasma (heparin).



Interpolated concentrations of native CCL28 in mouse serum and plasma samples.

The concentrations of CCL28 were measured in duplicates, interpolated from the CCL28 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 50%, plasma (citrate) 50%, plasma (EDTA) 50%, and plasma (heparin) 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CCL28 concentration was determined to be 461.6 pg/mL in serum, 615.2 pg/mL in plasma (citrate), 609.5 pg/mL in plasma (EDTA), and 390.0 pg/mL in plasma (heparin).



Sandwich ELISA - Mouse CCL28 ELISA Kit (ab210578)

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



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.



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

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