

Product datasheet

Mouse EMMPRIN ELISA Kit (CD147) ab205575

Recombinant SimpleStep ELISA

7 Images

Overview

**Product name** Mouse EMMPRIN ELISA Kit (CD147)

**Detection method** Colorimetric

**Precision**

Intra-assay

Sample	n	Mean	SD	CV%
Serum	5			2.6%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			7.5%

**Sample type** Urine, Serum, Plasma, Cell culture extracts, Tissue Extracts

**Assay type** Sandwich (quantitative)

**Sensitivity** 1.7 pg/ml

**Range** 15.625 pg/ml - 1000 pg/ml

**Recovery**

Sample specific recovery

Sample type	Average %	Range
Urine	112.4	95.8% - 128.1%
Serum	89.9	86.1% - 93.6%
Cell culture media	96	92.4% - 98.1%
Hep Plasma	112.3	103.3% - 121.3%
EDTA Plasma	84	81.1% - 88.4%
Cit plasma	83.7	80.6% - 87.4%

<b>Assay time</b>	1h 30m
<b>Assay duration</b>	One step assay
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse <b>Does not react with:</b> Goat, Cow, Pig
<b>Product overview</b>	<p>Mouse EMMPRIN ELISA Kit (CD147) (ab205575) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of EMMPRIN (CD147) protein in plasma, serum, tissue extracts, urine, and cell culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse EMMPRIN (CD147) with 1.7 pg/ml sensitivity.</p> <p>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:</p> <ul style="list-style-type: none"> <li>- Single-wash protocol reduces assay time to 90 minutes or less</li> <li>- High sensitivity, specificity and reproducibility from superior antibodies</li> <li>- Fully validated in biological samples</li> <li>- 96-wells plate breakable into 12 x 8 wells strips</li> </ul> <p>A 384-well SimpleStep ELISA® microplate (<a href="#">ab203359</a>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.</p>
<b>Notes</b>	<p>EMMPRIN plays an important role in targeting the monocarboxylate transporters SLC16A1, SLC16A3 and SLC16A8 to the plasma membrane. EMMPRIN plays pivotal roles in spermatogenesis, embryo implantation, neural network formation and tumor progression. EMMPRIN stimulates adjacent fibroblasts to produce matrix metalloproteinases (MMPS). EMMPRIN seems to be a receptor for oligomannosidic glycans. In vitro, EMMPRIN promotes outgrowth of astrocytic processes.</p> <p>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.</p>
<b>Platform</b>	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 EMMPRIN Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml

Components	1 x 96 tests
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 4BR	1 x 6ml
Mouse EMMPRIN Lyophilized Recombinant Protein	2 vials
Mouse EMMPRIN Capture Antibody (Lyophilized)	1 vial
Plate Seals	1 unit
Sample Diluent 25BS	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

Plays pivotal roles in spermatogenesis, embryo implantation, neural network formation and tumor progression. Stimulates adjacent fibroblasts to produce matrix metalloproteinases (MMPS). May target monocarboxylate transporters SLC16A1, SLC16A3 and SLC16A8 to plasma membranes of retinal pigment epithelium and neural retina. Seems to be a receptor for oligomannosidic glycans. In vitro, promotes outgrowth of astrocytic processes.

## Tissue specificity

Present only in vascular endothelium in non-neoplastic regions of the brain, whereas it is present in tumor cells but not in proliferating blood vessels in malignant gliomas.

## Sequence similarities

Contains 1 Ig-like C2-type (immunoglobulin-like) domain.  
Contains 1 Ig-like V-type (immunoglobulin-like) domain.

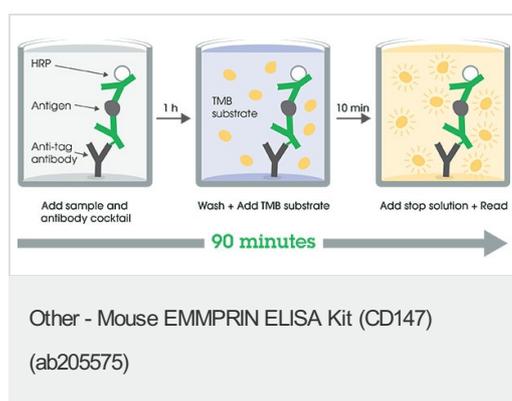
## Post-translational modifications

N-glycosylated.

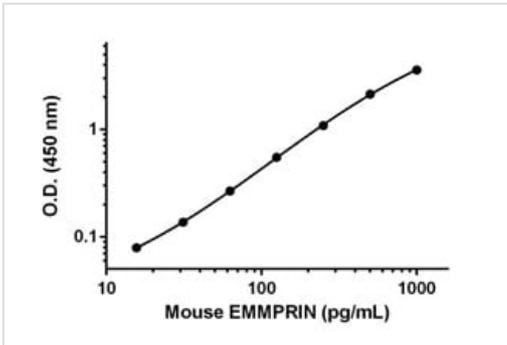
## Cellular localization

Cell membrane. Melanosome. Colocalizes with SLC16A1 and SLC16A8 (By similarity). Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

## Images

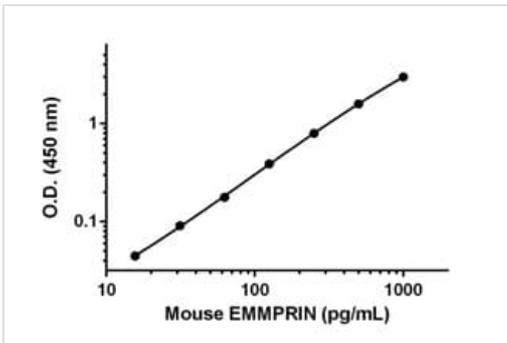


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



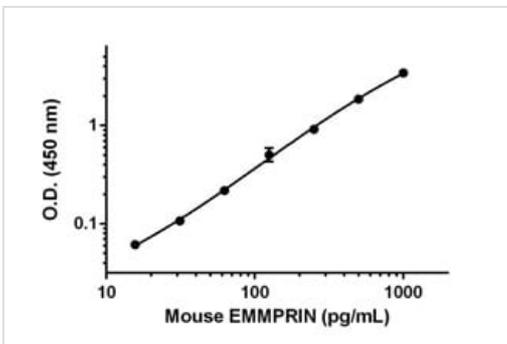
Background-subtracted data values (mean +/- SD) are graphed.

Example of mouse EMMPRIN standard curve in Sample Diluent NS.



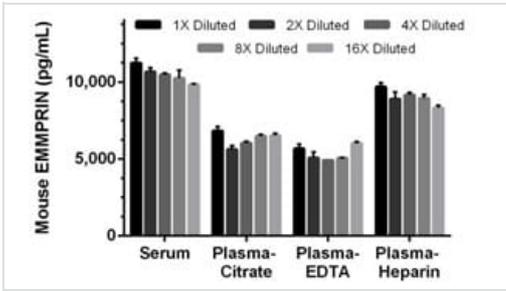
Background-subtracted data values (mean +/- SD) are graphed.

Example of mouse EMMPRIN standard curve in Sample Diluent 25BS.



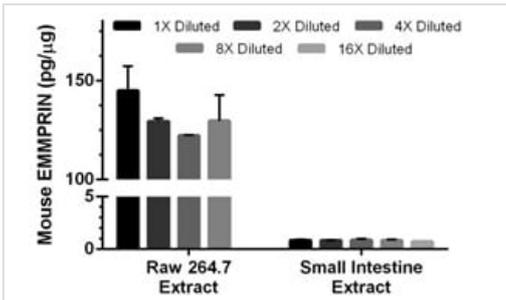
Background-subtracted data values (mean +/- SD) are graphed.

Example of mouse EMMPRIN standard curve in 1X Cell extraction Buffer PTR.



Interpolated concentrations of EMMPRIN in mouse serum, plasma, cell culture supernatant and urine samples.

EMMPRIN in mouse serum, plasma, cell culture supernatant and urine samples. The concentrations of EMMPRIN were measured in duplicates, interpolated from the EMMPRIN standard curves and corrected for sample dilution. Note that 1X Diluted serum and plasma samples were pre-diluted to 10%. Note that 1X Diluted Raw 264.7 day 3 cell culture supernatant samples were neat. Note that 1X Diluted Mouse Urine (Female) samples were pre-diluted to 25%. The interpolated, dilution factor-corrected values are plotted in pg of EMMPRIN per mL of neat sample (mean +/- SD, n=2).



Interpolated concentrations of EMMPRIN in mouse extract samples.

The concentrations of EMMPRIN were measured in duplicates, interpolated from the EMMPRIN standard curves and corrected for sample dilution. Note that 1X Diluted Raw 264.7 cell extract samples were at 5 μg/mL. Note that 1X Diluted Small Intestine extract samples were at 500 μg/mL. The interpolated, dilution factor-corrected values are plotted in pg of EMMPRIN per μg of total protein (mean +/- SD, n=2).

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Sandwich ELISA - Mouse EMMPRIN ELISA Kit  
(CD147) (ab205575)

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

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

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