# abcam

## Product datasheet

# Mouse CD93 ELISA Kit ab233620

Recombinant SimpleStep ELISA

9 Images

Overview

**Product name** 

**Detection method** 

**Precision** 

Mouse CD93 ELISA Kit

Colorimetric

SD Sample Mean CV% n Serum 5 4.2%

Inter-assay

Intra-assay

Sample	n	Mean	SD	CV%
Serum	3			5.7%

Sample type

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

Homogenate

Assay type

Sandwich (quantitative)

Sensitivity

3.4 pg/ml

Range

23.4 pg/ml - 1500 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	102	98% - 107%
Tissue Extracts	99	97% - 112%
Hep Plasma	108	101% - 113%
EDTA Plasma	101	98% - 106%
Cit plasma	103	99% - 110%
Tissue Homogenate	108	102% - 117%

1

Assay time 1h 30m

**Assay duration** One step assay

Species reactivity Reacts with: Mouse

Does not react with: Cow

**Product overview** 

Mouse CD93 ELISA Kit (ab233620) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CD93 protein in edta plasma, hep plasma, serum, tissue extracts, tissue homogenate, cell culture supernatant, and cit plasma. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse CD93 with 3.4 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.

**Notes** 

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** 

Microplate (12 x 8 well strips)

#### **Properties**

#### Storage instructions

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

Components	1 x 96 tests
10X Mouse CD93 Capture Antibody	1 x 600µl
10X Mouse CD93 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 4BR	1 x 6ml

Components	1 x 96 tests
Mouse CD93 Lyophilized Recombinant Protein	2 vials
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

Function Receptor (or element of a larger receptor complex) for C1q, mannose-binding lectin (MBL2) and

pulmonary surfactant protein A (SPA). May mediate the enhancement of phagocytosis in

monocytes and macrophages upon interaction with soluble defense collagens. May play a role in

intercellular adhesion.

Tissue specificity Highly expressed in endothelial cells, platelets, cells of myeloid origin, such as monocytes and

neutrophils. Not expressed in cells of lymphoid origin.

Sequence similarities Contains 1 C-type lectin domain.

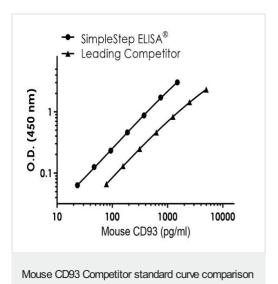
Contains 5 EGF-like domains.

Post-translational modifications

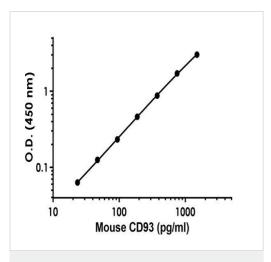
N- and O-glycosylated.

Cellular localization Membrane.

#### **Images**

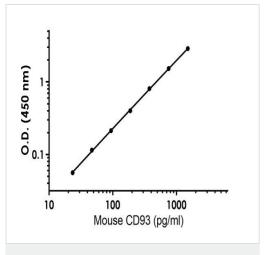


Standard curve comparison between Mouse CD93 SimpleStep ELISA® kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.



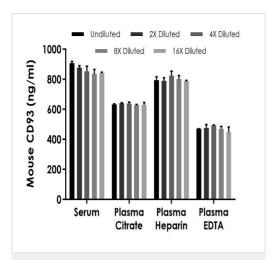
Example of mouse CD93 standard curve in Sample Diluent NS





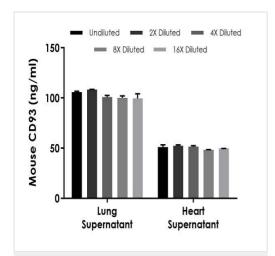
Example of mouse CD93 standard curve in 1X Cell Extraction Buffer PTR

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



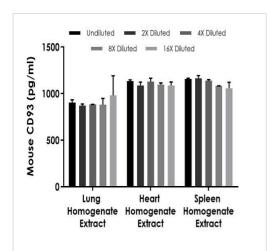
Interpolated concentrations of native CD93 in mouse serum and plasma samples

The concentrations of CD93 were measured in duplicates, interpolated from the CD93 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1: 1,000, plasma (citrate) 1: 500, plasma (heparin) 1: 1,000, and plasma (EDTA) 1: 500. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CD93 concentration was determined to be 863 ng/mL in serum, 633 ng/mL in plasma (citrate), 799 ng/ml in plasma (heparin), and 468 ng/ml in plasma (EDTA).



Interpolated concentrations of native CD93 in mouse tissue culture supernatant samples

The concentrations of CD93 were measured in duplicates, interpolated from the CD93 standard curves and corrected for sample dilution. Undiluted samples are as follows: mouse lung supernatant 1: 200 and mouse heart supernatant 2%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CD93 concentration was determined to be 103 ng/mL in mouse lung supernatant and 50 ng/ml in mouse heart supernatant.



Interpolated concentrations of native CD93 in mouse lung, heart, and spleen homogenate extract samples based on a 3  $\mu$ g/mL, 25  $\mu$ g/mL, and 50  $\mu$ g/mL extract load respectively

The concentrations of CD93 were measured in duplicate and interpolated from the CD93 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CD93 concentration was determined to be 898 pg/mL in lung homogenate extract, 1116 pg/ml in heart homogenate extract, and 1133 ng/mL in spleen homogenate extract samples.



Research with confidence Consistent and

reproducible results

Long-term and scalable supply Recombinant technology

Success from the

Ethical standards

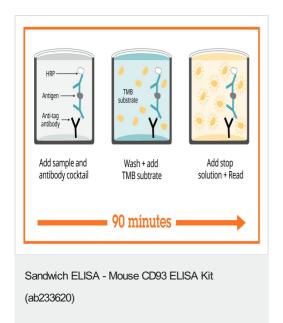
Success from the first experiment

Confirmed specificity

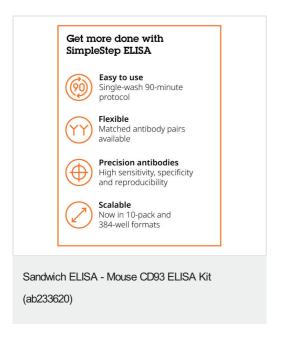
nt compliant
Animal-free production

Sandwich ELISA - Mouse CD93 ELISA Kit (ab233620)

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 ELISA® kits see <u>here</u>.

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

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