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# **Product datasheet**

# Mouse CD23 ELISA Kit ab206984

Recombinant SimpleStepELISA

5 Images

Overview

**Product name** Mouse CD23 ELISA Kit

**Detection method** Colorimetric

**Precision** Intra-assay

| Sample | n | Mean | SD | CV%  |
|--------|---|------|----|------|
| Serum  | 5 |      |    | 7.9% |

Inter-assay

| Sample | n | Mean | SD | CV%  |
|--------|---|------|----|------|
| Serum  | 3 |      |    | 9.5% |

Sample type Cell culture supernatant, Serum, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 2 pg/ml

31.25 pg/ml - 2000 pg/ml Range

Recovery Sample specific recovery

| Sample type        | Average % | Range           |
|--------------------|-----------|-----------------|
| Serum              | 126.1     | 119.2% - 133.4% |
| Cell culture media | 120.7     | 117% - 123.3%   |
| EDTA Plasma        | 89.2      | 85.8% - 92.3%   |
| Cit plasma         | 81.3      | 77.8% - 83.9%   |

Assay time 1h 30m

**Assay duration** One step assay

**Species reactivity** Reacts with: Mouse

#### **Product overview**

#### Does not react with: Pig

Mouse CD23 ELISA Kit (ab206984) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CD23 protein in cell culture supernatant, serum, cit plasma, and edta plasma. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse CD23 with 2 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** 

CD23 is a low-affinity receptor for immunoglobulin E (IgE) and CR2/CD21. It has essential roles in the regulation of IgE production and in the differentiation of B-cells (it is a B-cell-specific antigen). It is a 47 kDa type II transmembrane glycoprotein containing a short N-terminal cytoplasmic tail, a transmembrane domain, and extracellular domain containing C-type lectin domain. Two membrane isoforms and soluble CD23 fragements exist.

**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 CD23 Capture Antibody            | 1 x 600µl    |
| 10X Mouse CD23 Detector Antibody           | 1 x 600µl    |
| 10X Wash Buffer PT (ab206977)              | 1 x 20ml     |
| Antibody Diluent CPR                       | 1 x 6ml      |
| Mouse CD23 Lyophilized Recombinant Protein | 2 vials      |
| Plate Seals                                | 1 unit       |
| Sample Diluent 25BS                        | 1 x 20ml     |
| Sample Diluent NS (ab193972)               | 1 x 50ml     |
|  |              |

| Components  | 1 x 96 tests |
|---|--------------|
| SimpleStep Pre-Coated 96-Well Microplate (ab206978) | 1 unit       |
| Stop Solution                                       | 1 x 12ml     |
| TMB Development Solution                            | 1 x 12ml     |

**Function** This receptor has essential roles in the regulation of IgE production and in the differentiation of B-

cells (it is a B-cell-specific antigen).

Sequence similarities Contains 1 C-type lectin domain.

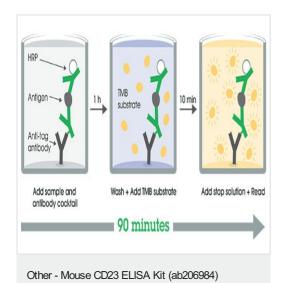
Post-translational

modifications

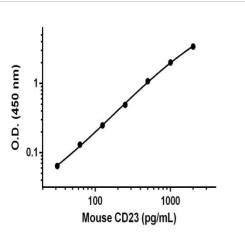
N- and O-glycosylated.

**Cellular localization** Cell membrane. Secreted. Also exists as a soluble excreted form.

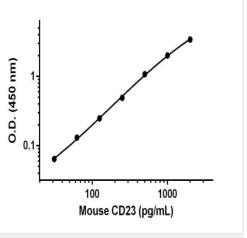
# **Images**



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.

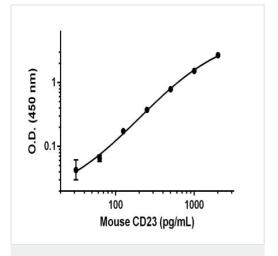


Example of CD23 standard curve in Sample Diluent NS.

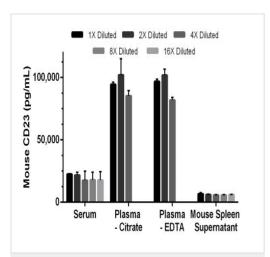


Background-subtracted data values (mean +/- SD) are graphed.

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



Example of CD23 standard curve in Sample Diluent 25BS.



Interpolated concentrations of CD23 in mouse serum, plasma and cell culture supernatant samples.

The concentrations of CD23 were measured in duplicates, interpolated from the CD23 standard curves and corrected for sample dilution. Note that 1X Diluted serum samples were prediluted to 2.5%. Note that 1X Diluted plasma samples were prediluted to 5%. Note that 1X Diluted Mouse spleen Day 5 cell culture supernatant samples were pre-diluted to 25%. The interpolated, dilution factor-corrected values are graphed in pg of CD23 per mL of neat sample (mean +/- SD, n=2).



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

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(ab206984)

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