

## Product datasheet

### Mouse CD80 ELISA Kit ab245721

Recombinant SimpleStep ELISA

[7 Images](#)

#### Overview

**Product name** Mouse CD80 ELISA Kit

**Detection method** Colorimetric

#### Precision

Intra-assay

Sample	n	Mean	SD	CV%
serum	5			5.6%

Inter-assay

Sample	n	Mean	SD	CV%
serum	3			5.7%

**Sample type**

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

**Assay type**

Sandwich (quantitative)

**Sensitivity**

2 pg/ml

**Range**

6.25 pg/ml - 400 pg/ml

#### Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	106	100% - 113%
Serum	101	91% - 110%
Cell culture extracts	99	88% - 106%
Hep Plasma	111	108% - 115%
Cit plasma	107	99% - 117%

**Assay time**

1h 30m

**Assay duration**

One step assay

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

Mouse CD80 ELISA Kit (ab245721) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CD80 protein in cell culture extracts, cell culture supernatant, cit plasma, hep plasma, serum, and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse CD80 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 ([ab203359](#)) 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**

Pre-coated microplate (12 x 8 well strips)

**Properties****Storage instructions**

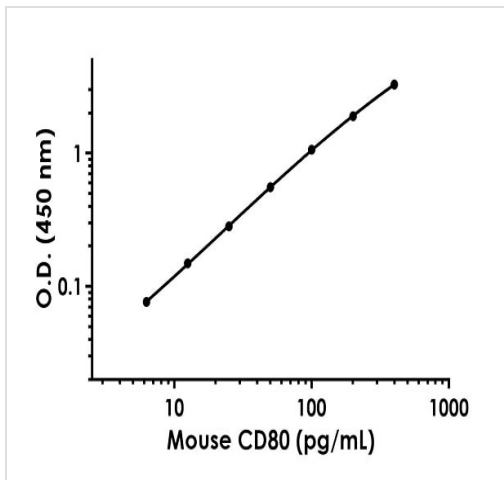
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Mouse CD80 Capture Antibody	1 x 600µl
10X Mouse CD80 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 5BR	1 x 6ml
Mouse CD80 Lyophilized recombinant Protein	2 vials
Plate Seal	1 unit
Sample Diluent NS (ab193972)	1 x 12ml

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

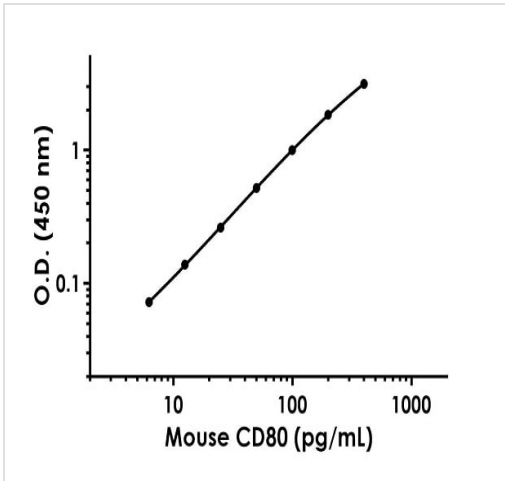
<b>Function</b>	Involved in the costimulatory signal essential for T-lymphocyte activation. T-cell proliferation and cytokine production is induced by the binding of CD28 or CTLA-4 to this receptor.
<b>Tissue specificity</b>	Expressed on activated B-cells, macrophages and dendritic cells.
<b>Sequence similarities</b>	Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
<b>Cellular localization</b>	Membrane.

## Images



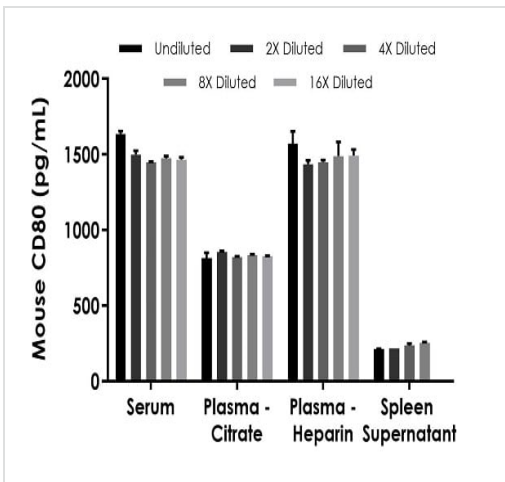
The CD80 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

Example of mouse CD80 standard curve in Sample Diluent NS.



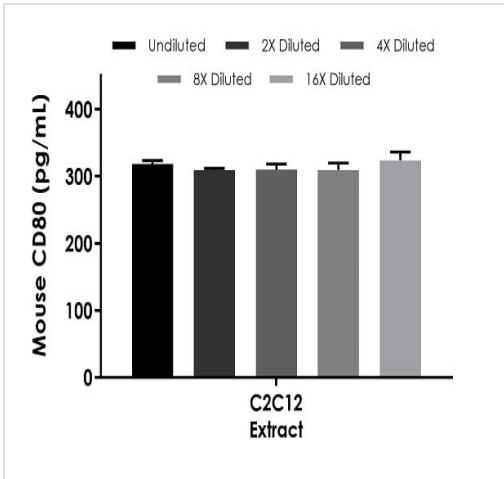
Example of mouse CD80 standard curve in 1X Cell Extraction Buffer PTR.

The CD80 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.



Interpolated concentrations of native CD80 in mouse serum, plasma, and cell culture supernatant samples.

The concentrations of CD80 were measured in duplicates, interpolated from the CD80 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 25%, plasma (citrate) 50%, plasma (heparin) 25%, and spleen supernatant 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CD80 concentration was determined to be 1,505.1 pg/mL in serum, 829.0 pg/mL in plasma (citrate), 1,487.5 pg/mL in plasma (heparin), and 228.8 pg/ml in spleen supernatant.



Interpolated concentrations of native CD80 in mouse C2C12 cell extract based on a 10 µg/mL extract load.

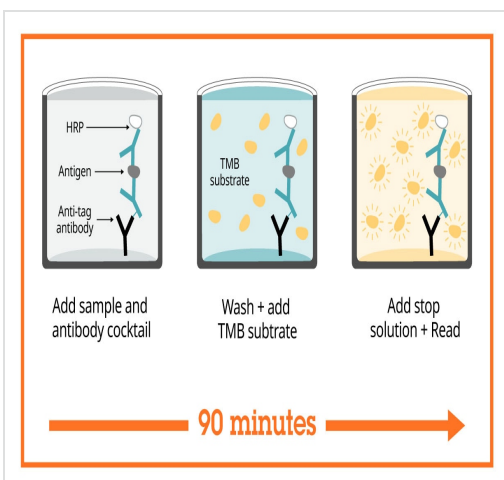
The concentrations of CD80 were measured in duplicate and interpolated from the CD80 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CD80 concentration was determined to be 314.7 pg/mL in C2C12 cell extract.

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

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

Sandwich ELISA - Mouse CD80 ELISA Kit (ab245721)



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.

Sandwich ELISA - Mouse CD80 ELISA Kit (ab245721)

**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

To learn more about the advantages of SimpleStep ELISA® kits see [here](#).

Sandwich ELISA - Mouse CD80 ELISA Kit  
(ab245721)

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

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