

Product datasheet

Human CD200R ELISA Kit (CD200R1) ab272196

Recombinant SimpleStep ELISA

[5 Images](#)

Overview

Product name Human CD200R ELISA Kit (CD200R1)

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Serum	8			7.5%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			7.7%

Sample type Serum, Cell Lysate, Hep Plasma, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 11.89 pg/ml

Range 46.88 pg/ml - 3000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	115	112% - 120%
Cell Lysate	99	90% - 116%
Hep Plasma	91	81% - 99%
EDTA Plasma	93	81% - 110%
Cit plasma	92	83% - 109%

Assay time 1h 30m

Assay duration One step assay

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

Human CD200R ELISA kit (ab272196) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CD200R protein in serum, plasma and cell and tissue culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human CD200R with 11.89 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

CD200R (CD200R1), is a transmembrane glycoprotein member of the immunoglobulin superfamily. CD200R acts as an inhibitory receptor for the CD200/OX-2 cell surface glycoprotein. CD200R is mainly expressed in myeloid cells and CD4+ T-cells and known to interact with CD200 in variety of cells including neurons, epithelial cells, endothelial cells, fibroblasts, and lymphoid cells. Activation of CD200R regulates the expression of proinflammatory molecules including TNF-alpha, interferons, and inducible nitric oxide synthase. Recent studies suggest that CD200R may prove useful in monitoring changes in bone metabolism. Mouse, rat and cow share 57%, 57% and 60% sequence homology with human CD200R.

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**

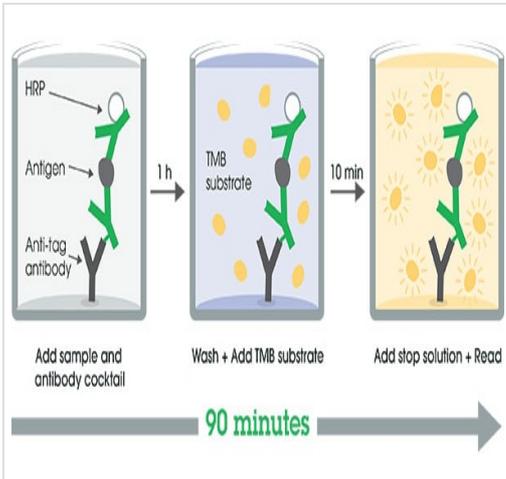
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human CD200R (CD200R1) Capture Antibody	1 x 600µl
10X Human CD200R (CD200R1) Detector Antibody	1 x 600µl

Components	1 x 96 tests
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 5BI	1 x 6ml
Human CD200R (CD200R1) 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

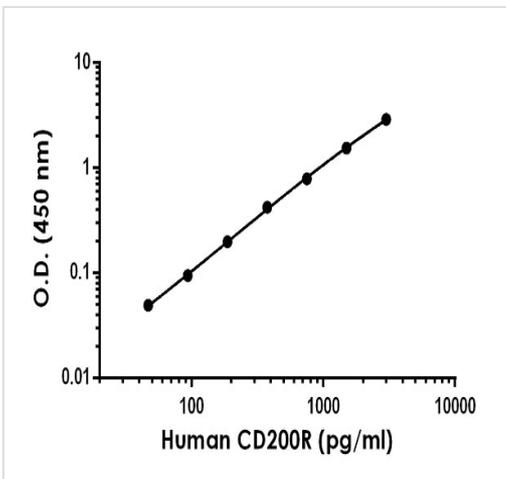
Function	Receptor for the CD200/OX2 cell surface glycoprotein. Also binds to HHV-8 K14 viral CD200 homolog with identical affinity and kinetics as the host CD200.
Tissue specificity	Expressed in granulocytes, monocytes, most T cells, neutrophils, basophils and a subset of NK, NKT and B cells (at protein level). Expressed in bone marrow, lymph nodes, spleen, lung, liver, spinal cord, kidney. Expressed in monocyte-derived dendritic and mast cells.
Sequence similarities	Belongs to the CD200R family. Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
Post-translational modifications	The mature form of isoform 2 and/or isoform 4 starts at sequence position 27 of the corresponding isoform.
Cellular localization	Secreted and Cell membrane.

Images



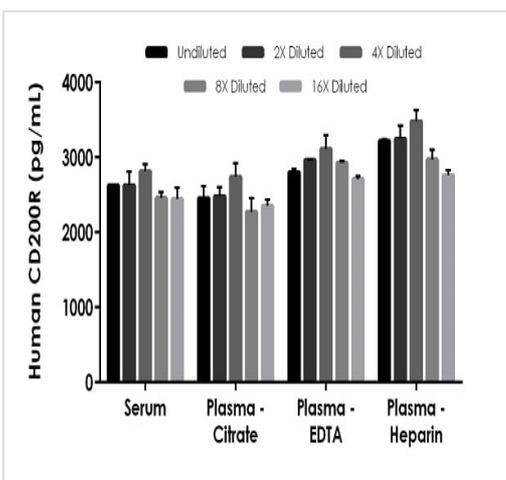
SimpleStep ELISA Protocol Diagram

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.



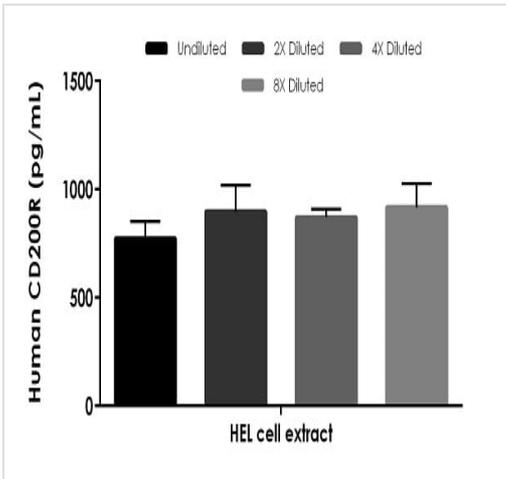
Example of human CD200R standard curve in Sample Diluent NS.

The CD200R 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 CD200R in human serum, and plasma samples.

The concentrations of CD200R were measured in duplicates, interpolated from the CD200R 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 CD200R concentration was determined to be 2,595 pg/mL in serum, 2,460 pg/mL in plasma (citrate), 2,904 pg/mL in plasma (EDTA), and 3,137 pg/mL in plasma (heparin).



Interpolated concentrations of native CD200R in human HEL cell extract based on a 500 µg/mL extract load.

The concentrations of CD200R were measured in duplicate and interpolated from the CD200R standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CD200R concentration was determined to be 817.1 pg/mL in HEL cell extract sample.

Powered by recombinant antibodies

<p>Research with confidence Consistent and reproducible results</p>	<p>Long-term and scalable supply Recombinant technology</p>
<p>Success from the first experiment Confirmed specificity</p>	<p>Ethical standards compliant Animal-free production</p>

Sandwich ELISA - Human CD200R ELISA Kit (CD200R1) (ab272196)

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

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