abcam

Product datasheet

Human CD51 ELISA Kit ab235650

Recombinant SimpleStep ELISA

1 References 4 Images

Overview

Recovery

Product name Human CD51 ELISA Kit

Detection method Colorimetric

Precision Intra-assav

Sample	n	Mean	SD	CV%
Tissue	8			6.4%

Sample type Cell culture extracts, Tissue Extracts

Assay type Sandwich (quantitative)

Sensitivity 13.8 pg/ml

Range 47 pg/ml - 3000 pg/ml

Sample type	Average %	Range
Cell culture extracts	90	% - %
Tissue Extracts	94	% - %

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Human

Product overview Human CD51 ELISA Kit (ab235650) is a single-wash 90 min sandwich ELISA designed for the

> quantitative measurement of CD51 protein in cell culture extracts and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human CD51 with 13.8 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

Sample specific recovery

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

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 CD51 Capture Antibody	1 x 600µl
10X Human CD51 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 5BI	1 x 6ml
Human CD51 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Function

The alpha-V integrins are receptors for vitronectin, cytotactin, fibrinoectin, fibrinogen, laminin, matrix metalloproteinase-2, osteopontin, osteomodulin, prothrombin, thrombospondin and vWF. They recognize the sequence R-G-D in a wide array of ligands. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.

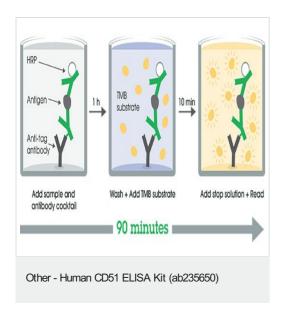
Belongs to the integrin alpha chain family.

Contains 7 FG-GAP repeats.

Cellular localization

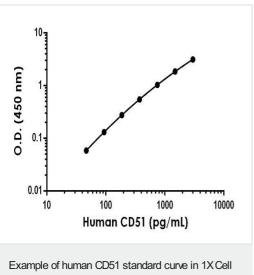
Membrane.

Images

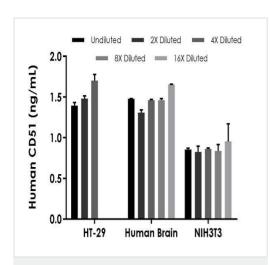


SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

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



Example of human CD51 standard curve in 1X Cell Extraction Buffer PTR



Interpolated concentrations of native CD51 in HT-29 cell extract, human brain extract, and NIH3T3

Pervanadate-treated extract samples

Interpolated concentrations of native CD51 in HT-29 cell extract, human brain extract, and NlH3T3 Pervanadate-treated extract samples based on a 500 μ g/mL, 250 μ g/mL, and 62.5 μ g/mL extract load, respectively. The concentrations of CD51 were measured in duplicate and interpolated from the CD51 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CD51 concentration was determined to be 1.52 ng/mL in HT-29 cell extract, 1.47 ng/mL in human brain extract and 0.87 ng/mL in NlH3T3 Pervanadate-treated extract.



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

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