

Product datasheet

Human Coronin 1α ELISA Kit ab214032

Recombinant SimpleStep ELISA

[1 References](#) [8 Images](#)

Overview

Product name Human Coronin 1a ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Human serum	5			5.6%

Inter-assay

Sample	n	Mean	SD	CV%
Human serum	3			6.4%

Sample type

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

Assay type

Sandwich (quantitative)

Sensitivity

49 pg/ml

Range

0.313 ng/ml - 20 ng/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	93	89% - 98%
Cell culture extracts	102	80% - 120%
Hep Plasma	96	93% - 98%
EDTA Plasma	93	89% - 94%
Cit plasma	83	79% - 87%
serum free media	94	88% - 98%

Assay time 1h 30m

Assay duration One step assay

Species reactivity **Reacts with:** Human

Product overview Human Coronin 1a ELISA Kit (ab214032) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Coronin 1a protein in cell culture extracts, cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Coronin 1a with 49 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 Coronin 1A is a WD-repeat containing protein that plays a role in cytoskeleton dynamics. Coronin 1A binds to actin. Mouse and rat Coronin 1A have 95% and 93% protein sequence identity to human Coronin 1A.

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 Coronin 1a Capture Antibody	1 x 600µl
10X Human Coronin 1a 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

Components	1 x 96 tests
Antibody Diluent 5BI	1 x 6ml
Human Coronin 1a 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

May be a crucial component of the cytoskeleton of highly motile cells, functioning both in the invagination of large pieces of plasma membrane, as well as in forming protrusions of the plasma membrane involved in cell locomotion. In mycobacteria-infected cells, its retention on the phagosomal membrane prevents fusion between phagosomes and lysosomes.

Tissue specificity

Expressed in brain, thymus, spleen, bone marrow and lymph node. Low in lung and gut.

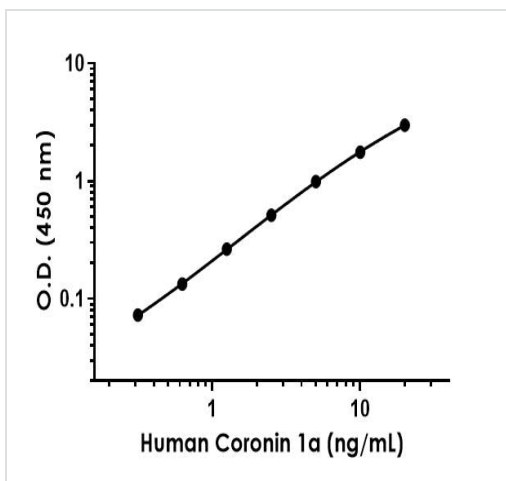
Sequence similarities

Belongs to the WD repeat coronin family.
Contains 7 WD repeats.

Cellular localization

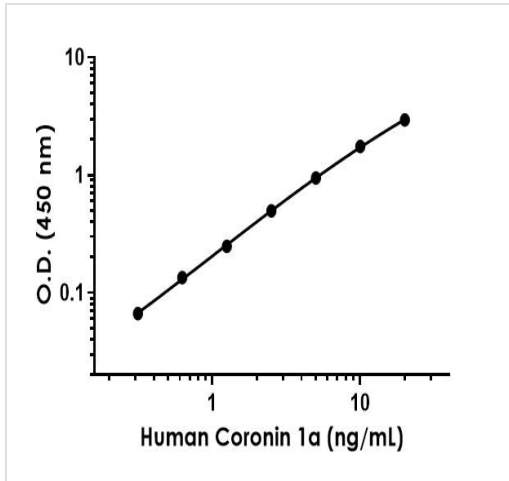
Cytoplasm > cytoskeleton. Cytoplasm > cell cortex. Cytoplasmic vesicle > phagosome membrane. In non-infected macrophages, associated with the cortical microtubule network. In mycobacteria-infected macrophages, becomes progressively relocalized and retained around the mycobacterial phagosomes. Retention on the phagosomal membrane is strictly dependent on mycobacterial viability and not due to impaired acidification.

Images



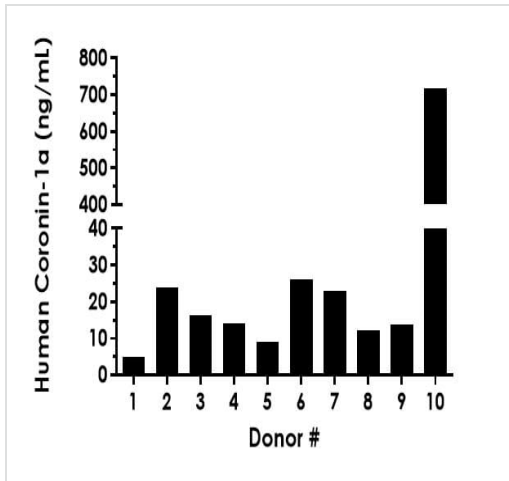
Background-subtracted data values (mean +/- SD) are graphed.

Example of Human Coronin 1a standard curve in Sample Diluent NS.



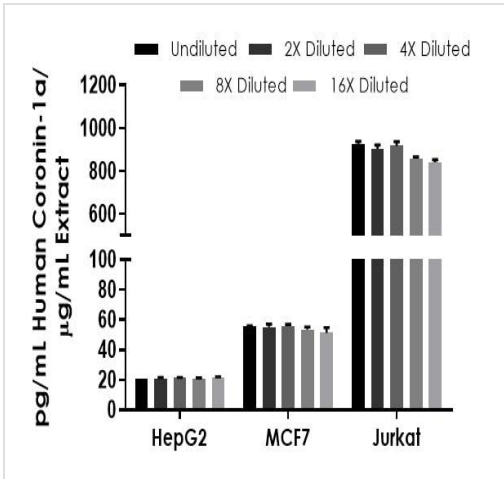
Background-subtracted data values (mean +/- SD) are graphed.

Example of Human Coronin 1a standard curve in 1X Cell Extraction Buffer PTR.



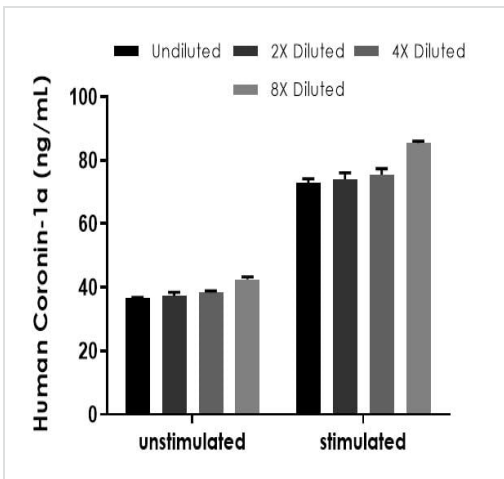
Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Coronin 1a concentration was determined to be 85.97 ng/mL with a range of 4.85 – 716.8 ng/mL.

Serum from ten individual healthy human female donors was measured in duplicate.



Interpolated concentrations of native Coronin 1a in human HEPG2, MCF7, and Jurkat cell extract samples and samples based on a 400 $\mu\text{g/mL}$, 200 $\mu\text{g/mL}$, and 8 $\mu\text{g/mL}$ extract load respectively

The concentrations of Coronin 1a were measured in duplicate and interpolated from the Coronin 1a standard curve and corrected for sample dilution and extract load. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean Coronin 1a concentration was determined to be 21.4 $\text{pg}/\mu\text{g}$ HEPG2 extract, 54.4 $\text{pg}/\mu\text{g}$ MCF7 extract and 888.5 $\text{pg}/\mu\text{g}$ Jurkat extract.



Interpolated concentrations of native Coronin 1a in human Peripheral Blood Monocyte Cell (PBMC) culture supernatant samples

PBMC cells were grown in the absence (unstimulated) or presence of Phorbol Myristate Acetate (PMA) and phytohemagglutinin (PHA) (stimulated) for 3 days. The concentrations of Coronin 1a were measured in duplicates, interpolated from the Coronin 1a standard curves and corrected for sample dilution. Undiluted samples are as follows: unstimulated 50% and stimulated (25%). The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean Coronin 1a concentration was determined to be 38.7 ng/mL in unstimulated and 76.9 ng/mL in stimulated, and 6.7 ng/mL in media. This pair is highly cross reactive with bovine serum. Dilute bovine serum containing media such that the concentration of bovine serum is less than 0.1% or run a media control sample.

Powered by
recombinant antibodies



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



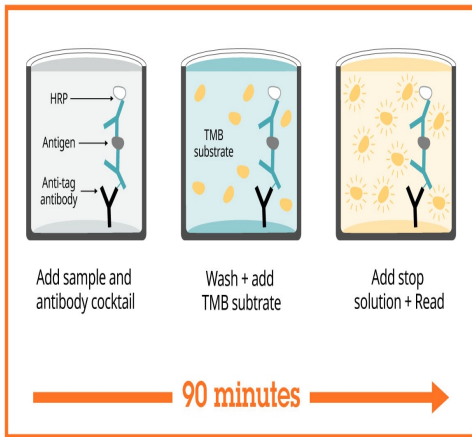
Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Sandwich ELISA - Human Coronin 1a ELISA Kit
(ab214032)

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



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 - Human Coronin 1a ELISA Kit
(ab214032)

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

Sandwich ELISA - Human Coronin 1a ELISA Kit
(ab214032)

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

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