

Human Beclin-1 ELISA Kit ab254511

Recombinant SimpleStep ELISA®

[1 References](#) [5 Images](#)

Overview

Product name Human Beclin-1 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Extract	24			5.2%

Inter-assay

Sample	n	Mean	SD	CV%
Extract	3			1.4%

Sample type

Cell culture extracts

Assay type

Sandwich (quantitative)

Sensitivity

671 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	109	99% - 117%

Assay time

1h 30m

Assay duration

One step assay

Species reactivity

Reacts with: Human

Product overview

Human Beclin-1 ELISA Kit (ab254511) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Beclin-1 protein in cell culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Beclin-1 with 671 ng/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

Beclin-1, also known as BECN1, plays a key role in the regulation of autophagy and cell death. Together with PI3KC3, Beclin-1 nucleates autophagosome formation and is essential for proper degradation of cellular components. Improper beclin-1 signaling is associated with schizophrenia, tumorigenesis, and neurodegeneration.

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.

Tested applications

Suitable for: Sandwich ELISA

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 Beclin-1 Capture Antibody	1 x 600µl
10X Human Beclin-1 Detector Antibody	2 vials
10X Wash Buffer PT (ab206977)	1 x 20ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 4BR	1 x 6ml
Human Beclin-1 Lyophilized Recombinant Protein	2 vials
Plate Seal	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

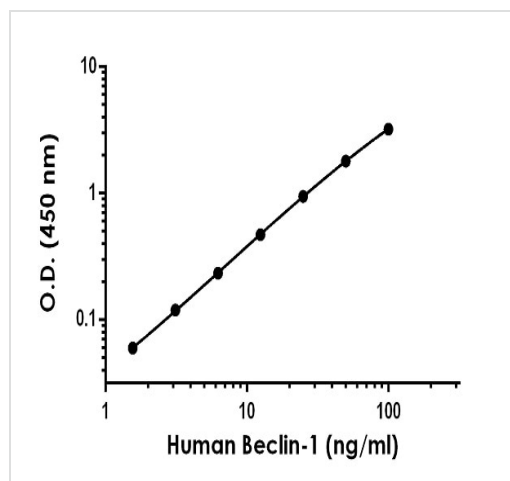
Function	Plays a central role in autophagy (By similarity). May play a role in antiviral host defense. Protects against infection by a neurovirulent strain of Sindbis virus.
Tissue specificity	Ubiquitous.
Sequence similarities	Belongs to the beclin family.
Cellular localization	Golgi apparatus > trans-Golgi network membrane. Interaction with ATG14 promotes translocation to autophagosomes. Expressed in dendrites and cell bodies of cerebellar Purkinje cells.

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab254511 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

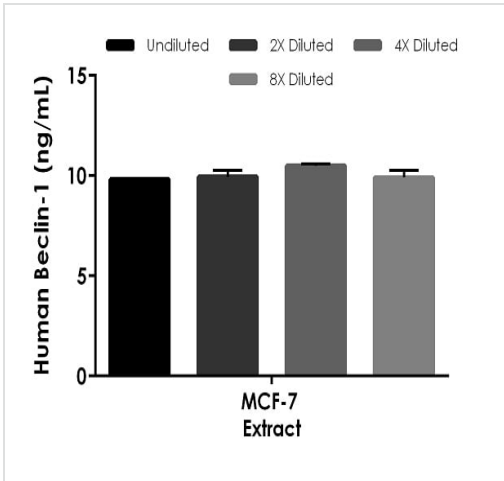
Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration.

Images



The Beclin-1 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 human Beclin-1 standard curve in 1X Cell Extraction Buffer PTR.



Interpolated concentrations of native Beclin-1 in human MCF-7 cell extract based on a 1,000 µg/mL extract load.

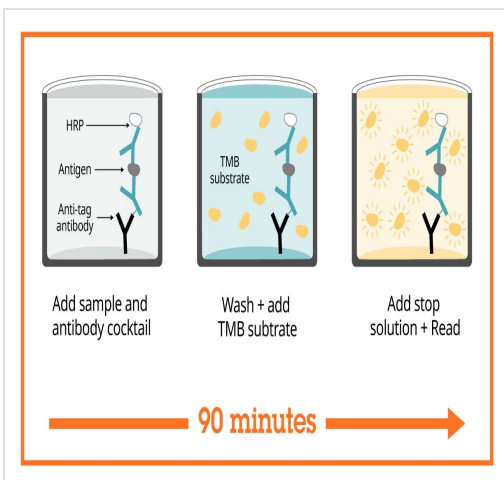
The concentrations of Beclin-1 were measured in duplicate and interpolated from the Beclin-1 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Beclin-1 concentration was determined to be 10.03 ng/mL.

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 - Human Beclin-1 ELISA Kit (ab254511)



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 Beclin-1 ELISA Kit (ab254511)

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 Beclin-1 ELISA Kit
(ab254511)

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

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors