

Human RAB8 ELISA Kit ab255718

Recombinant SimpleStep ELISA[®]

[5 Images](#)

Overview

Product name Human RAB8 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Extract	8			3%

Inter-assay

Sample	n	Mean	SD	CV%
Extract	3			2.2%

Sample type Cell Lysate

Assay type Sandwich (quantitative)

Sensitivity 0.024 ng/ml

Range 0.09 ng/ml - 6 ng/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture extracts	95	93% - 98%
Tissue Extracts	102	100% - 105%
Cell Lysate	87	81% - 93%

Assay time 1h 30m

Assay duration One step assay

Species reactivity **Reacts with:** Human

Product overview

Human RAB8 ELISA Kit (ab255718) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of RAB8 protein in cell lysate. It uses our proprietary SimpleStep

ELISA® technology. Quantitate Human RAB8 with 0.024 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

The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different sets of downstream effectors directly responsible for vesicle formation, movement, tethering, and fusion. Rab proteins are highly conserved across species; human RAB8, also known as Ras-related protein Rab-8A, is 97.5% identical on amino acids level to mouse RAB8. Mouse and rat RAB8 proteins are 100% identical.

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 RAB8 Capture Antibody	1 x 600µl
10X Human RAB8 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 4BR	1 x 6ml
Human RAB8 Lyophilized Recombinant Protein	2 vials

Components	1 x 96 tests
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

May be involved in vesicular trafficking and neurotransmitter release. Together with RAB11A, RAB3IP, the exocyst complex, PARD3, PRKCI, ANXA2, CDC42 and DNMBP promotes transcytosis of PODXL to the apical membrane initiation sites (AMIS), apical surface formation and lumenogenesis. Together with MYO5B and RAB11A participates in epithelial cell polarization.

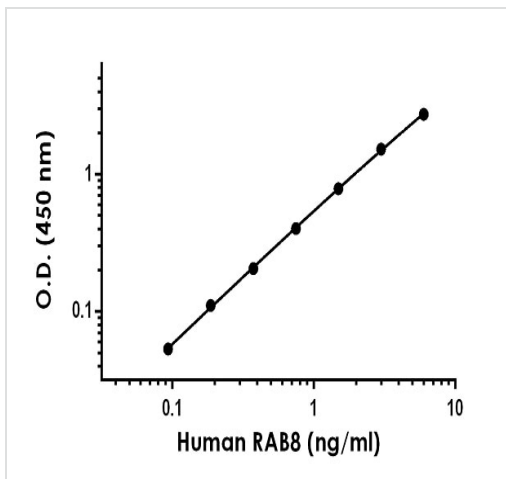
Sequence similarities

Belongs to the small GTPase superfamily. Rab family.

Cellular localization

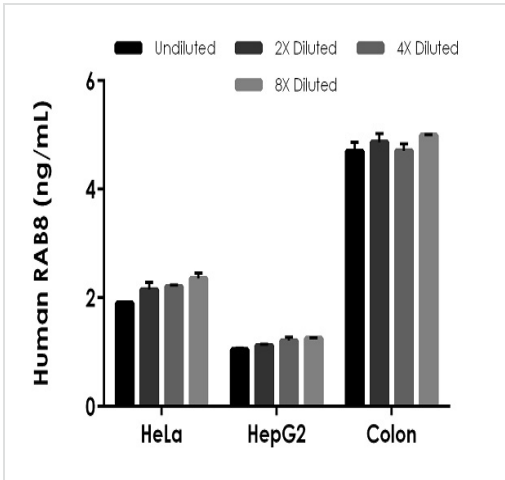
Cell membrane. Golgi apparatus. Cytoplasm > perinuclear region. Cell projection. Colocalizes with OPTN at the Golgi complex and in vesicular structures close to the plasma membrane. In the GDP-bound form, present in the perinuclear region. Shows a polarized distribution to distal regions of cell protrusions in the GTP-bound form. Colocalizes with PARD3, PRKCI, EXOC5, OCLN, PODXL and RAB11A in apical membrane initiation sites (AMIS) during the generation of apical surface and lumenogenesis.

Images



The RAB8 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 RAB8 standard curve in 1XCell Extraction Buffer PTR.



Interpolated concentrations of native RAB8 in human HeLa extract based on a 25 µg/mL extract, HepG2 cell extract based on a 50 µg/mL extract, and human colon extract based on a 250 µg/mL extract.

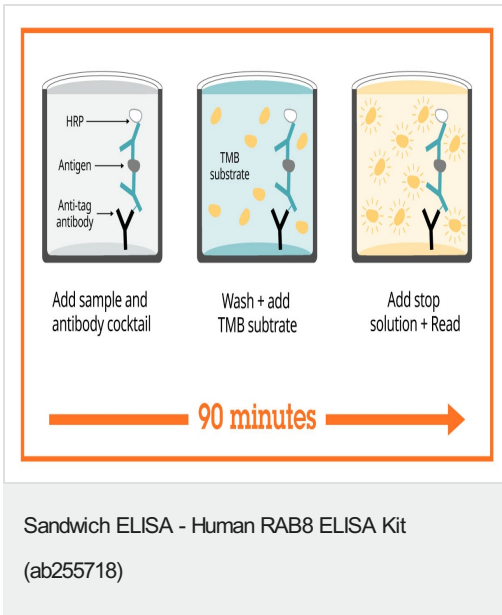
The concentrations of RAB8 were measured in duplicate and interpolated from the RAB8 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean RAB8 concentration was determined to be 2.16 ng/mL in HeLa cell extract, 1.16 ng/mL HepG2 cell extract, and 4.82 ng/mL in human colon tissue 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

Sandwich ELISA - Human RAB8 ELISA Kit
(ab255718)

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.

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 RAB8 ELISA Kit
(ab255718)

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

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