abcam

ab327945

Anti-ACE2 antibody [EPR29937-577] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR29937-577
Purification technique	Affinity purification Protein A

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information Ace2

Function

Essential counter-regulatory carboxypeptidase of the renin-angiotensin hormone system that is a critical regulator of blood volume, systemic vascular resistance, and thus cardiovascular homeostasis. Converts angiotensin I to angiotensin 1-9, a nine-amino acid peptide with anti-hypertrophic effects in cardiomyocytes, and angiotensin II to angiotensin 1-7, which then acts as a beneficial vasodilator and anti-proliferation agent, counterbalancing the actions of the vasoconstrictor angiotensin II. Also removes the C-terminal residue from three other vasoactive peptides, neurotensin, kinetensin, and des-Arg bradykinin, but is not active on bradykinin. Also cleaves other biological peptides, such as apelins, casomorphins and dynorphin A (By similarity). By cleavage of angiotensin II, may be an important regulator of heart function (PubMed:12075344, PubMed:12967627). By cleavage of angiotensin II, may also have a protective role in acute lung injury (PubMed:16001071). Plays an important role in amino acid transport by acting as binding partner of amino acid transporter SLC6A19, regulating its trafficking on the cell surface and its activity (PubMed:18424768, PubMed:19185582, PubMed:22677001).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab327945 is the carrier-free version of ab325333

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

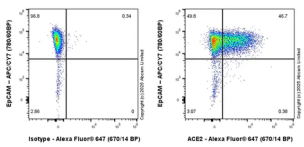
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

3 product images



Flow Cytometry - Anti-ACE2 antibody [EPR29937-577] - BSA and Azide free (ab327945)

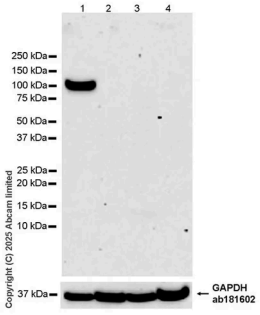
ACE2 Flow Cytometry staining of Mouse renal PTEC (Mouse Renal Proximal Tubular Epithelial Cell) using rabbit Anti-ACE2 antibody

This data was developed using ab325333, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of Mouse renal PTEC (Mouse Renal Proximal Tubular Epithelial Cell) cells labelling ACE2 with ab325333 at 1/500 dilution (0.1ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat anti-Rabbit IgG (Alexa Fluor® 647 ab150083) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells.Cells were co-stained with anti-EpCAM conjugated to APC/CY7.



Western blot - Anti-ACE2 antibody [EPR29937-577] - BSA and Azide free (ab327945)

ACE2 Western blot staining of Mouse kidney tissue lysate using rabbit Anti-ACE2 antibody

This data was developed using ab325333, the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Low expression: thymus spleen brain

In Western blot Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) (1:200000) (36KDa).

All lanes:
Western blot - Anti-ACE2 antibody [EPR29937-577] (ab325333) at 1/1000 dilution

Lane 1:
Mouse kidney tissue lysate at 20 µg

Lane 2:
Mouse thymus tissue lysate at 20 µg

Lane 3:
Mouse spleen tissue lysate at 20 µg

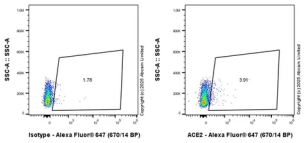
Lane 4:
Mouse brain tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 92 kDa, 36 kDa

Exposure time: 180s



Flow Cytometry - Anti-ACE2 antibody [EPR29937-577] - BSA and Azide free (ab327945)

ACE2 Flow Cytometry staining of Mouse spleen cell using rabbit Anti-ACE2 antibody

This data was developed using ab325333, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of Mouse spleen cell cells labelling ACE2 with ab325333 at 1/500 dilution (0.1ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat anti-Rabbit IgG (Alexa Fluor® 647 ab150083) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.