abcam

Product datasheet

Anti-Epsin 1 antibody [EPR3023] - BSA and Azide free ab247415



7 Images

Overview

Product name Anti-Epsin 1 antibody [EPR3023] - BSA and Azide free

Description Rabbit monoclonal [EPR3023] to Epsin 1 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: ICC/IF, WB

Unsuitable for: IHC-P

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

General notes ab247415 is the carrier-free version of <u>ab75879</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

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 <u>conjugation kits</u> 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.

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.

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 production

For more information see here.

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

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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

EPR3023

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal

Isotype IgG

Applications

Clone number

The Abpromise guarantee Our Abpromise guarantee covers the use of ab247415 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
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 58 kDa.

Application notes Is unsuitable for IHC-P.

Target

Function Binds to membranes enriched in phosphatidylinositol 4,5-bisphosphate (Ptdlns(4,5)P2). Modifies

membrane curvature and facilitates the formation of clathrin-coated invaginations (By similarity).

Regulates receptor-mediated endocytosis.

Sequence similarities Belongs to the epsin family.

Contains 1 ENTH (epsin N-terminal homology) domain. Contains 3 UIM (ubiquitin-interacting motif) repeats.

Domain The NPF repeat domain is involved in EPS15 binding.

The DPW repeat domain is involved in AP2A2 and clathrin binding.

The [DE]-X(1,2)-F-X-X-[FL]-X-X-R motif mediates interaction with the AP-2 complex subunit

AP2B1.

Post-translational

modifications

Phosphorylated on serine and/or threonine residues in mitotic cells. Phosphorylation reduces interaction with REPS2, AP-2 and the membrane fraction. Depolarization of synaptosomes

results in dephosphorylation.

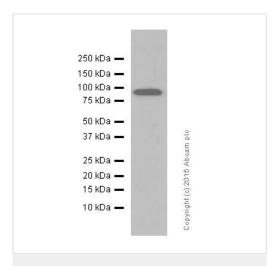
Ubiquitinated.

Cellular localization Cytoplasm. Cell membrane. Nucleus. Membrane > clathrin-coated pit. Associated with the

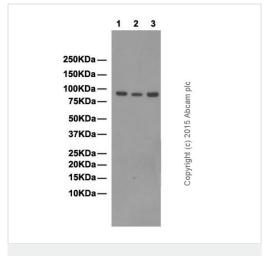
cytoplasmic membrane at sites where clathrin-coated pits are forming. Colocalizes with clathrin and AP-2 in a punctate pattern on the plasma membrane. Detected in presynaptic nerve terminals

and in Golgi stacks. May shuttle to the nucleus when associated with ZBTB16/ZNF145.

Images



Western blot - Anti-Epsin 1 antibody [EPR3023] - BSA and Azide free (ab247415)



Western blot - Anti-Epsin 1 antibody [EPR3023] - BSA and Azide free (ab247415)

Anti-Epsin 1 antibody [EPR3023] (<u>ab75879</u>) at 1/5000 dilution (purified) + rat brain at 20 µg

Secondary

HRP goat anti-rabbit lgG (H+L) at 1/50000 dilution

Predicted band size: 58 kDa Observed band size: 94 kDa

This data was developed using <u>ab75879</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

All lanes : Anti-Epsin 1 antibody [EPR3023] (<u>ab75879</u>) at 1/1000 dilution (purified)

Lane 1: 293T cell lysate

Lane 2: K562 cell lysate

Lane 3: U-87 MG cell lysate

Lysates/proteins at 10 µg per lane.

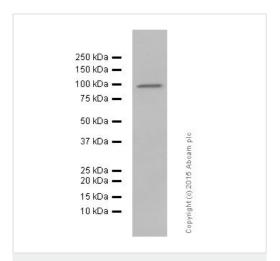
Secondary

All lanes: HRP goat anti-rabbit lgG (H+L) at 1/10000 dilution

Predicted band size: 58 kDa **Observed band size:** 94 kDa

This data was developed using <u>ab75879</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Epsin 1 antibody [EPR3023] - BSA and Azide free (ab247415)

ab75879 MERGED

Immunocytochemistry/ Immunofluorescence - Anti-Epsin 1 antibody [EPR3023] - BSA and Azide free (ab247415)

Anti-Epsin 1 antibody [EPR3023] (ab75879) at 1/5000 dilution (purified) + mouse brain tissue lysate at 20 μ g

Secondary

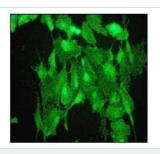
HRP goat anti-rabbit lgG (H+L) at 1/10000 dilution

Predicted band size: 58 kDa **Observed band size:** 94 kDa

This data was developed using <u>ab75879</u>, the same antibody clone in a different buffer formulation.

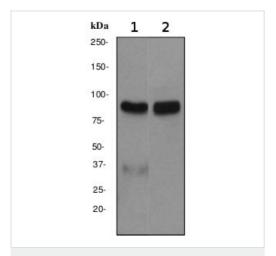
Blocking and dilution buffer: 5% NFDM/TBST.

This data was developed using ab75879, the same antibody clone in a different buffer formulation. Immunofluorescence staining of HeLa cells with purified ab75879 at a working dilution of 1/50, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit (ab150077), used at a dilution of 1/1000. ab7291, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with ab150120 (Alexa Fluor® 594 goat antimouse, 1/1000), shown in the top right hand panel. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified ab75879 was used at a dilution of 1/500 followed by an Alexa Fluor® 594 goat anti-mouse antibody (ab150120) at a dilution of 1/500. For negative control 2, ab7291 (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor[®] 488 goat anti-rabbit antibody (ab150077) at a dilution of 1/400.



Immunocytochemistry/ Immunofluorescence - Anti-Epsin 1 antibody [EPR3023] - BSA and Azide free (ab247415)

This data was developed using <u>ab75879</u>, the same antibody clone in a different buffer formulation.Unpurified <u>ab75879</u>, at a 1/100 dilution, staining Epsin 1 in SH-SY5Y cells by Immunofluorescence.



Western blot - Anti-Epsin 1 antibody [EPR3023] - BSA and Azide free (ab247415)

All lanes : Anti-Epsin 1 antibody [EPR3023] (<u>ab75879</u>) at 1/2000 dilution (unpurified)

Lane 1 : SH-SY5Y cell lysate
Lane 2 : HeLa cell lysate

Lysates/proteins at 10 µg per lane.

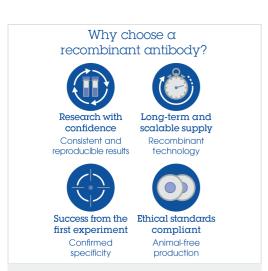
Secondary

All lanes: Goat anti-rabbit-HRP at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 58 kDa

This data was developed using <u>ab75879</u>, the same antibody clone in a different buffer formulation.



Anti-Epsin 1 antibody [EPR3023] - BSA and Azide free (ab247415)

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