

Product datasheet

Anti-Ezrin antibody [EPR803] ab133297

KO VALIDATED Recombinant RabMAb

6 Images

Overview

Product name	Anti-Ezrin antibody [EPR803]
Description	Rabbit monoclonal [EPR803] to Ezrin
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P Unsuitable for: Flow Cyt, ICC/IF or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human Ezrin aa 350-450. The exact sequence is proprietary.
Positive control	WB: HAP1, HeLa, HCT116, 293T, A549 and SH-SY5Y cell lysates. IHC-P: Human kidney tissue and Human transitional cell carcinoma tissue.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant</p>
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR803
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133297 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

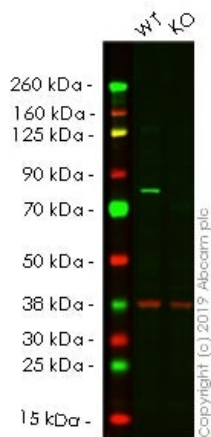
Application	Abreviews	Notes
WB		1/10000 - 1/50000. Detects a band of approximately 81 kDa (predicted molecular weight: 69 kDa).
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Application notes Is unsuitable for Flow Cyt, ICC/IF or IP.

Target

Function	Probably involved in connections of major cytoskeletal structures to the plasma membrane. In epithelial cells, required for the formation of microvilli and membrane ruffles on the apical pole. Along with PLEKHG6, required for normal macropinocytosis.
Tissue specificity	Expressed in cerebral cortex, basal ganglia, hippocampus, hypophysis, and optic nerve. Weakly expressed in brain stem and diencephalon. Stronger expression was detected in gray matter of frontal lobe compared to white matter (at protein level). Component of the microvilli of intestinal epithelial cells. Preferentially expressed in astrocytes of hippocampus, frontal cortex, thalamus, parahippocampal cortex, amygdala, insula, and corpus callosum. Not detected in neurons in most tissues studied.
Sequence similarities	Contains 1 FERM domain.
Developmental stage	Very strong staining is detected in the Purkinje cell layer and in part of the molecular layer of the infant brain compared to adult brain.
Post-translational modifications	Phosphorylated by tyrosine-protein kinases.
Cellular localization	Apical cell membrane. Cell projection. Cell projection > microvillus membrane. Cell projection > ruffle membrane. Cytoplasm > cell cortex. Cytoplasm > cytoskeleton. Localization to the apical membrane of parietal cells depends on the interaction with MPP5. Localizes to cell extensions and peripheral processes of astrocytes (By similarity). Microvillar peripheral membrane protein.

Images



Western blot - Anti-Ezrin antibody [EPR803]
(ab133297)

All lanes : Anti-Ezrin antibody [EPR803] (ab133297) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : EZR knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

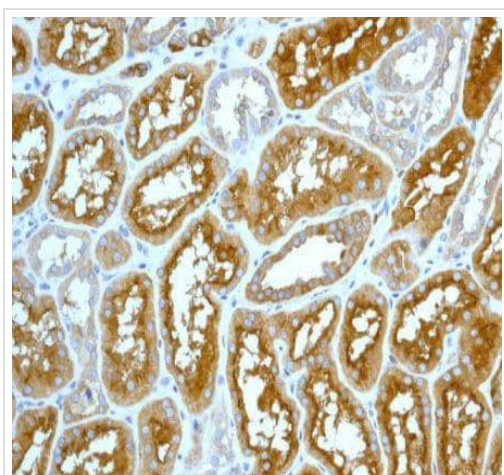
Performed under reducing conditions.

Predicted band size: 69 kDa

Observed band size: 75 kDa

Lanes 1- 2: Merged signal (red and green). Green - ab133297 observed at 75 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) observed at 37 kDa.

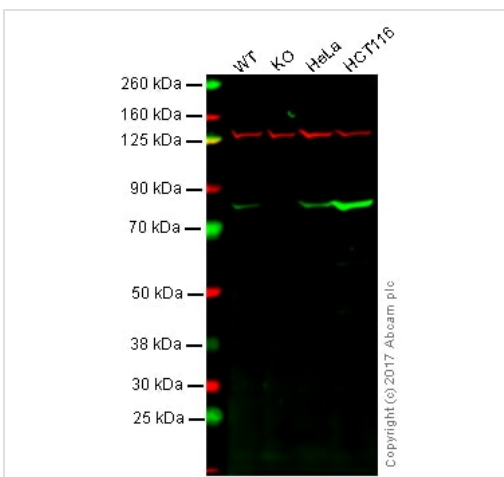
ab133297 was shown to react with Ezrin in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line [ab264912](#) (knockout cell lysate [ab256908](#)) was used. Wild-type HeLa and EZR knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab133297 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ezrin antibody [EPR803] (ab133297)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labelling Ezrin with ab133297 at 1/250 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-Ezrin antibody [EPR803] (ab133297)

All lanes : Anti-Ezrin antibody [EPR803] (ab133297) at 1/10000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate

Lane 2 : Ezrin knockout HAP1 whole cell lysate

Lane 3 : HeLa whole cell lysate

Lane 4 : HCT116 whole cell lysate

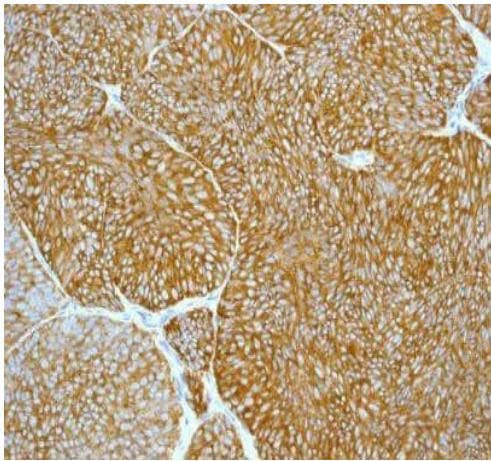
Lysates/proteins at 20 µg per lane.

Predicted band size: 69 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab133297 observed at 75 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab133297 was shown to specifically react with Ezrin in wild-type HAP1 cells as signal was lost in Ezrin knockout cells. Wild-type and

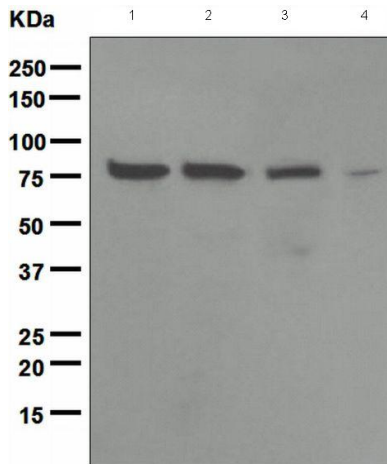
Ezrin knockout samples were subjected to SDS-PAGE. Ab133297 and **ab18058** (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/10000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ezrin antibody [EPR803] (ab133297)

Immunohistochemical analysis of paraffin-embedded Human transitional cell carcinoma tissue labelling Ezrin with ab133297 at 1/250 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-Ezrin antibody [EPR803] (ab133297)

All lanes : Anti-Ezrin antibody [EPR803] (ab133297) at 1/10000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : 293T cell lysate

Lane 3 : A549 cell lysate

Lane 4 : SH-SY5Y cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-rabbit HRP at 1/2000 dilution

Predicted band size: 69 kDa

Why choose a recombinant antibody?



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

Anti-Ezrin antibody [EPR803] (ab133297)

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

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