

## Product datasheet

# Anti-Caspr antibody [EPR7828] ab133634

**KO VALIDATED** Recombinant RabMAB

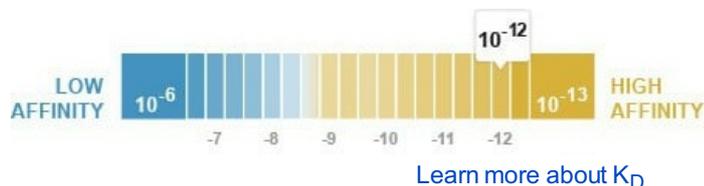
★★★★☆ 4 Abreviews 2 References 6 Images

### Overview

<b>Product name</b>	Anti-Caspr antibody [EPR7828]
<b>Description</b>	Rabbit monoclonal [EPR7828] to Caspr
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF <b>Unsuitable for:</b> Flow Cyt or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human Caspr aa 700-800 (extracellular). The exact sequence is proprietary.
<b>Positive control</b>	WB: HeLa (Boiled and Unboiled), SH-SY5Y (Boiled and Unboiled), Neuro-2a (Boiled and Unboiled), PC-12 (Boiled and Unboiled) IHC-P: Human cerebrum and Human astrocytoma tissue sections ICC/IF: Neuro-2a cells
<b>General notes</b>	<p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAB<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAB<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Dissociation constant (K<sub>D</sub>)</b>	K <sub>D</sub> = 1.40 x 10 <sup>-12</sup> M



<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR7828
<b>Isotype</b>	IgG

### Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab133634 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

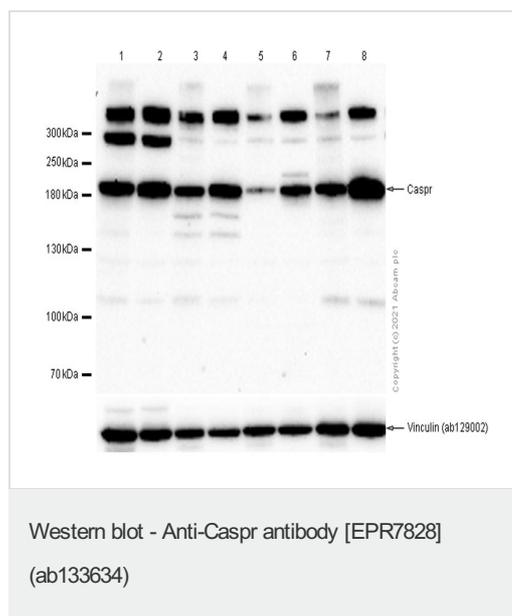
Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 165 kDa (predicted molecular weight: 156 kDa).
IHC-P	★★★★☆ (4)	1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Perform antigen retrieval before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
ICC/IF		1/100.

**Application notes** Is unsuitable for Flow Cyt or IP.

### Target

<b>Function</b>	Seems to play a role in the formation of functional distinct domains critical for saltatory conduction of nerve impulses in myelinated nerve fibers. Seems to demarcate the paranodal region of the axo-glial junction. In association with contactin may have a role in the signaling between axons and myelinating glial cells.
<b>Tissue specificity</b>	Predominantly expressed in brain. Weak expression detected in ovary, pancreas, colon, lung, heart, intestine and testis.
<b>Sequence similarities</b>	Belongs to the neurexin family. Contains 2 EGF-like domains. Contains 1 F5/8 type C domain. Contains 1 fibrinogen C-terminal domain. Contains 4 laminin G-like domains.
<b>Cellular localization</b>	Membrane.

## Images



**Lanes 1-7** : Anti-Caspr antibody [EPR7828] (ab133634) at 1/1000 dilution (Purified)

**Lane 8** : Anti-Caspr antibody [EPR7828] (ab133634) at 1/1000 dilution

**Lane 1** : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate boiled

**Lane 2** : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate unboiled

**Lane 3** : SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysate boiled

**Lane 4** : SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysate unboiled

**Lane 5** : Neuro-2a (Mouse neuroblastoma neuroblast) whole cell lysate boiled

**Lane 6** : Neuro-2a (Mouse neuroblastoma neuroblast) whole cell lysate unboiled

**Lane 7** : PC-12 (Rat adrenal gland pheochromocytoma ) whole cell lysate boiled

**Lane 8** : PC-12 (Rat adrenal gland pheochromocytoma ) whole cell lysate unboiled

Lysates/proteins at 20 µg per lane.

### Secondary

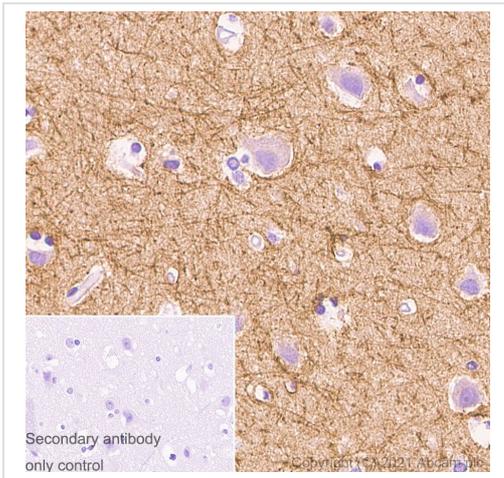
**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size:** 156 kDa

**Observed band size:** 220 kDa

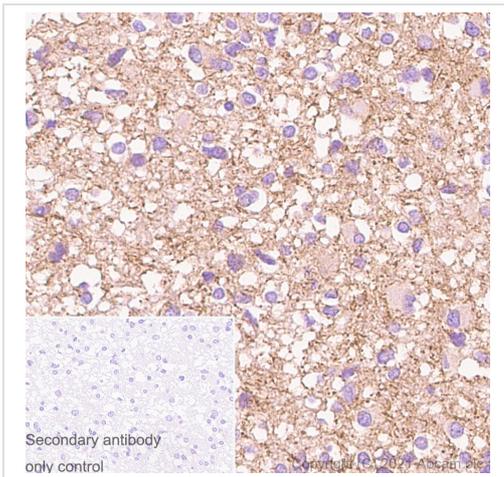
The molecular weight is consistent with that has been described in the literature (PMID: 20610764).

We are unsure about the nature of extra bands.



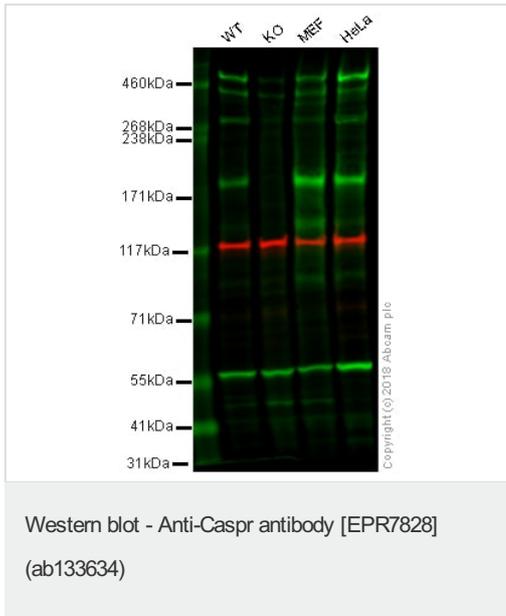
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspr antibody [EPR7828] (ab133634)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cerebrum tissue sections labeling Caspr with Purified ab133634 at 1:2000 dilution (0.29 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspr antibody [EPR7828] (ab133634)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human astrocytoma tissue sections labeling Caspr with Purified ab133634 at 1:2000 dilution (0.29 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



**All lanes** : Anti-Caspr antibody [EPR7828] (ab133634) at 1/1000 dilution

**Lane 1** : Wild-type HAP1 whole cell lysate

**Lane 2** : CNTNAP1 (Caspr) knockout HAP1 whole cell lysate

**Lane 3** : MEF whole cell lysate

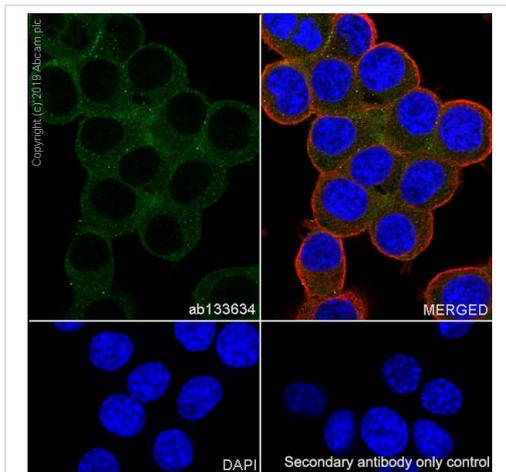
**Lane 4** : HeLa whole cell lysate

Lysates/proteins at 20 µg per lane.

**Predicted band size:** 156 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab133634 observed at 175 kDa. Red - loading control, [ab18058](#), observed at 130 kDa.

ab133634 was shown to recognize Caspr in wild-type HAP1 cells as signal was lost at the expected MW in CNTNAP1 (Caspr) knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and CNTNAP1 (Caspr) knockout samples were subjected to SDS-PAGE. ab133634 and [ab18058](#) (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/1000 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 1/20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence analysis of Neuro-2a (mouse neuroblastoma neuroblast) cells labeling Caspr with purified ab133634 at 1/100 (5.7 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

Immunocytochemistry/ Immunofluorescence - Anti-Caspr antibody [EPR7828] (ab133634)

**Why choose a recombinant antibody?**

 <b>Research with confidence</b> Consistent and reproducible results	 <b>Long-term and scalable supply</b> Recombinant technology
 <b>Success from the first experiment</b> Confirmed specificity	 <b>Ethical standards compliant</b> Animal-free production

Anti-Caspr antibody [EPR7828] (ab133634)

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

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