abcam

Product datasheet

Anti-Caspr antibody [EPR7828] - BSA and Azide free ab248583

KO VALIDATED Recombinant RabMAb

5 Images

Overview

Product name	Anti-Caspr antibody [EPR7828] - BSA and Azide free
Description	Rabbit monoclonal [EPR7828] to Caspr - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB, ICC/IF **Unsuitable for:** Flow Cyt or IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	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
General notes	ab248583 is the carrier-free version of **ab133634**. 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. Our **carrier-free** 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 **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. 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:

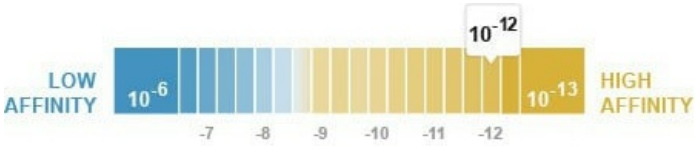
- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Dissociation constant (K_D)	$K_D = 1.40 \times 10^{-12}$ M



Learn more about K_D

Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR7828
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab248583 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

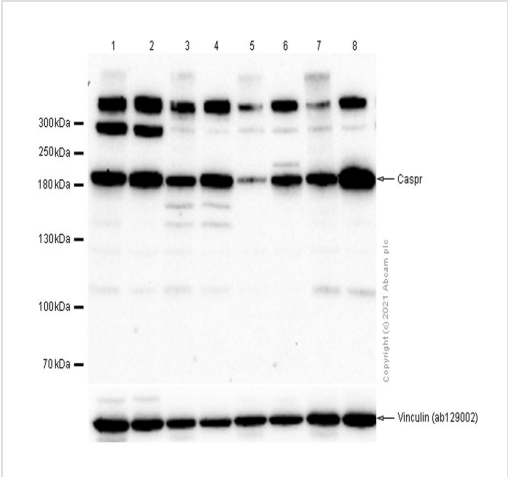
Application	Abreviews	Notes
IHC-P		1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Perform antigen retrieval before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee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

Application notes Is unsuitable for Flow Cyt or IP.

Target

Function	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.
Tissue specificity	Predominantly expressed in brain. Weak expression detected in ovary, pancreas, colon, lung, heart, intestine and testis.
Sequence similarities	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.
Cellular localization	Membrane.

Images



Western blot - Anti-Caspr antibody [EPR7828] - BSA and Azide free (ab248583)

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.

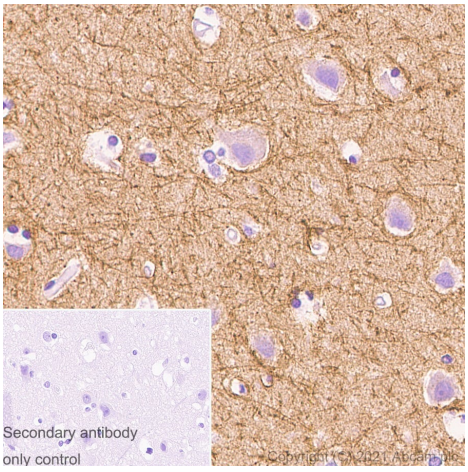
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 156 kDa
Observed band size: 220 kDa

This data was developed using **ab133634**, the same antibody clone in a different buffer formulation.

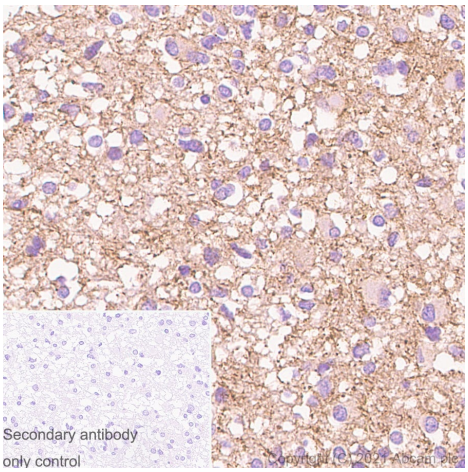
The molecular weight is consistent with that has been described in the literature (PMID: 20610764).

We are unsure about the nature of extra bands.



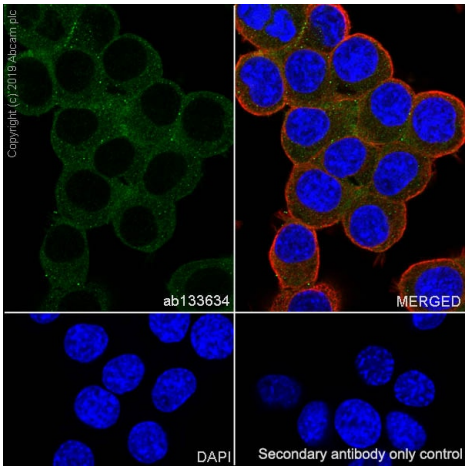
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspr antibody [EPR7828] - BSA and Azide free (ab248583)

This data was developed using **ab133634**, the same antibody clone in a different buffer formulation.
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.



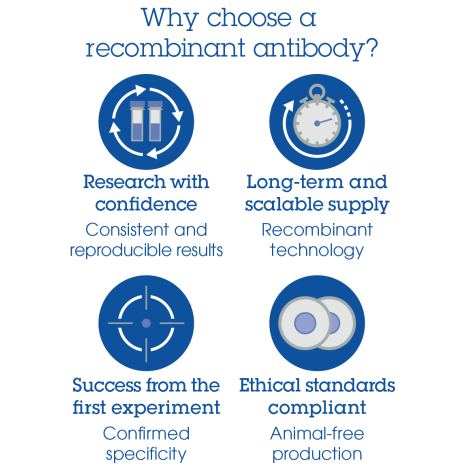
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspr antibody [EPR7828] - BSA and Azide free (ab248583)

This data was developed using **ab133634**, the same antibody clone in a different buffer formulation.
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.



Immunocytochemistry/ Immunofluorescence - Anti-Caspr antibody [EPR7828] - BSA and Azide free (ab248583)

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.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab133634**).



Anti-Caspr antibody [EPR7828] - BSA and Azide free (ab248583)

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