


Product datasheet

Anti-PEN2 antibody [EPR9200] ab154830

KO **VALIDATED** Recombinant RabMAb

★☆☆☆☆ [3 Abreviews](#) [5 References](#) [5 Images](#)

Overview

Product name	Anti-PEN2 antibody [EPR9200]
Description	Rabbit monoclonal [EPR9200] to PEN2
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P Unsuitable for: IP
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Neuro-2a, fetal lung and Human placenta lysates; Human skeletal muscle tissue; Neuro-2a cells.
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>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR9200

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab154830 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
Flow Cyt (Intra)		1/100 - 1/500. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Predicted molecular weight: 12 kDa.
IHC-P	★☆☆☆☆ (3)	1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application notes

Is unsuitable for IP.

Target

Function

Essential subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (beta-amyloid precursor protein). Probably represents the last step of maturation of gamma-secretase, facilitating endoproteolysis of presenilin and conferring gamma-secretase activity.

Tissue specificity

Widely expressed. Expressed in leukocytes, lung, placenta, small intestine, liver, kidney, spleen thymus, skeletal muscle, heart and brain.

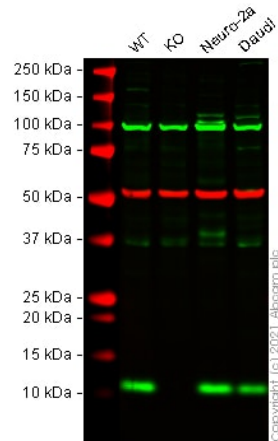
Sequence similarities

Belongs to the PEN-2 family.

Cellular localization

Endoplasmic reticulum membrane. Golgi apparatus > Golgi stack membrane. Predominantly located in the endoplasmic reticulum and in the cis-Golgi.

Images



Western blot - Anti-PEN2 antibody [EPR9200]
(ab154830)

All lanes : Anti-PEN2 antibody [EPR9200] (ab154830) at 1/1000 dilution

Lane 1 : Wild-type HEK-293 cell lysate

Lane 2 : PSENEN knockout HEK-293 cell lysate

Lane 3 : Neuro-2a cell lysate

Lane 4 : Daudi cell lysate

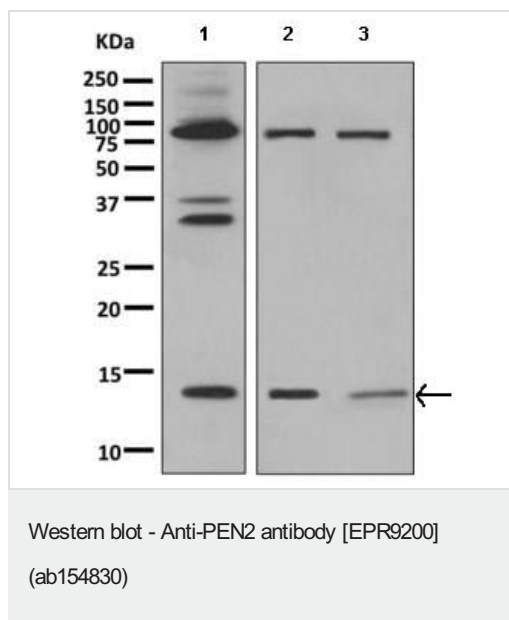
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 12 kDa

Observed band size: 12 kDa

False colour image of Western blot: Anti-PEN2 antibody [EPR9200] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab154830 was shown to bind specifically to PEN2. A band was observed at 12 kDa in wild-type HEK-293 cell lysates with no signal observed at this size in PSENEN knockout cell line [ab273720](#) (knockout cell lysate [ab273772](#)). To generate this image, wild-type and PSENEN knockout HEK-293 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



All lanes : Anti-PEN2 antibody [EPR9200] (ab154830) at 1/1000 dilution

Lane 1 : Neuro-2a cell lysate

Lane 2 : Fetal lung tissue lysate

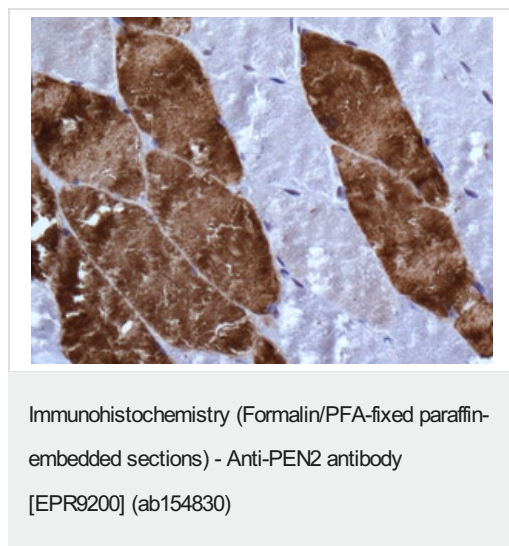
Lane 3 : Human placenta lysate

Lysates/proteins at 10 µg per lane.

Secondary

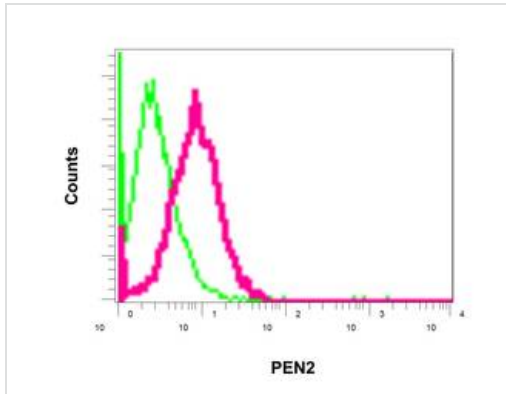
All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 12 kDa



Immunohistochemical analysis of paraffin-embedded Human skeletal muscle tissue labeling PEN2 with ab154830 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Intracellular flow cytometric analysis of permeabilized Neuro-2a cells labeling PEN2 with ab154830 at 1/100 dilution (red) compared to a rabbit IgG negative control (green).

Flow Cytometry (Intracellular) - Anti-PEN2 antibody [EPR9200] (ab154830)

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-PEN2 antibody [EPR9200] (ab154830)

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