

Product datasheet

Anti-PDE4B antibody [EPR11830] ab170939

KO VALIDATED Recombinant RabMAb

[2 References](#) [4 Images](#)

Overview

Product name	Anti-PDE4B antibody [EPR11830]
Description	Rabbit monoclonal [EPR11830] to PDE4B
Host species	Rabbit
Tested applications	Suitable for: WB, Flow Cyt Unsuitable for: ICC/IF, IHC-P or IP
Species reactivity	Reacts with: Mouse, Human Does not react with: Rat
Immunogen	Recombinant fragment within Human PDE4B aa 550 to the C-terminus. The exact sequence is proprietary. Database link: Q07343
Positive control	WB: HeLa, A549, Human fetal brain and Human glioma lysates; Mouse brain tissue lysate. Flow Cyt: A549 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> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been "predicted to work</p>

with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
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	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR11830
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab170939** in the following tested applications.

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

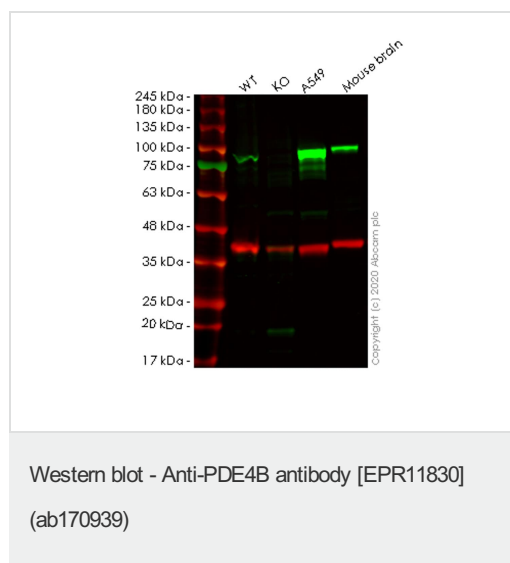
Application	Abreviews	Notes
WB		1/1000 - 1/5000. Predicted molecular weight: 83 kDa.
Flow Cyt		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Application notes	Is unsuitable for ICC/IF, IHC-P or IP.
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Target

Function	Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes. May be involved in mediating central nervous system effects of therapeutic agents ranging from antidepressants to antiasthmatic and anti-inflammatory agents.
Tissue specificity	Expressed in brain, heart, lung and skeletal muscle.
Pathway	Purine metabolism; 3',5'-cyclic AMP degradation; AMP from 3',5'-cyclic AMP: step 1/1.
Sequence similarities	Belongs to the cyclic nucleotide phosphodiesterase family. PDE4 subfamily.

Images



All lanes : Anti-PDE4B antibody [EPR11830] (ab170939) at 1/500 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : PDE4B knockout HeLa cell lysate

Lane 3 : A549 cell lysate

Lane 4 : Mouse brain tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

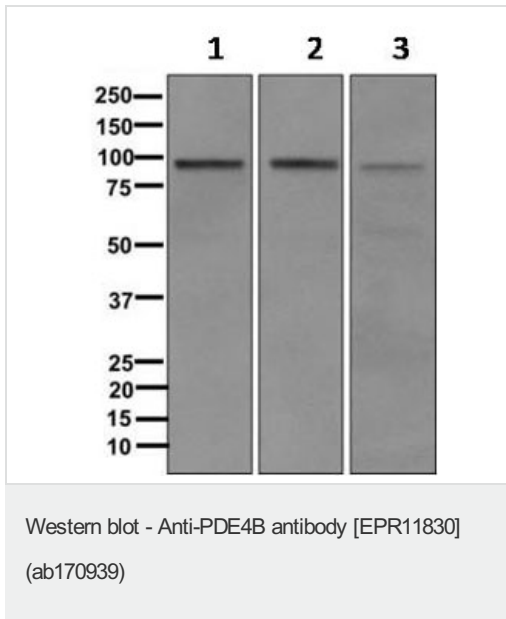
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 83 kDa

Observed band size: 83 kDa

Lanes 1-4: Merged signal (red and green). Green - ab170939 observed at 83 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

ab170939 Anti-PDE4B antibody [EPR11830] was shown to specifically react with PDE4B in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab265259](#) (knockout cell lysate [ab257576](#)) was used. Wild-type and PDE4B knockout samples were subjected to SDS-PAGE. ab170939 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 500 dilution and 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.



All lanes : Anti-PDE4B antibody [EPR11830] (ab170939) at 1/1000 dilution

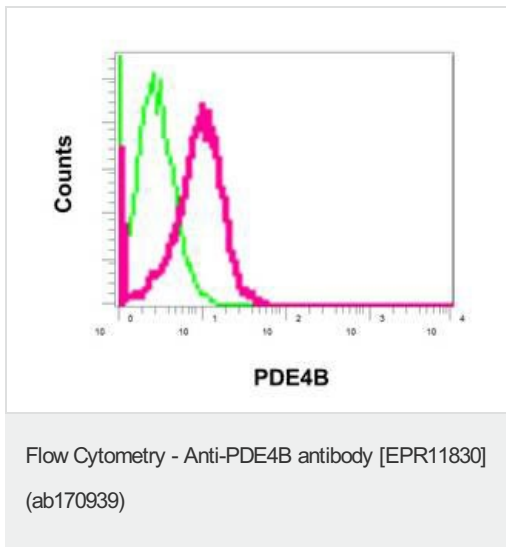
Lane 1 : Human fetal brain lysates

Lane 2 : Human glioma lysates

Lane 3 : A549 lysates





Lysates/proteins at 10 µg per lane.

Predicted band size: 83 kDa



Flow cytometric analysis of permeabilized A549 cells labeling PDE4B using ab170939 (red) at 1/10 dilution, or a rabbit IgG (negative) (green).

Why choose a recombinant antibody?

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

Anti-PDE4B antibody [EPR11830] (ab170939)

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

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