# abcam

# Product datasheet

# Anti-PDE4B antibody [EPR11830] ab170939



Recombinant RabMAb

3 References 4 Images

Overview

**Product name** Anti-PDE4B antibody [EPR11830]

**Description** Rabbit monoclonal [EPR11830] to PDE4B

**Host species** Rabbit

**Tested applications** Suitable for: Flow Cyt (Intra), WB

Unsuitable for: ICC/IF,IHC-P or IP

Species reactivity Reacts with: Mouse, Human

Does not react with: Rat

Recombinant fragment within Human PDE4B aa 550 to the C-terminus. The exact sequence is **Immunogen** 

proprietary.

Database link: Q07343

Positive control WB: HeLa, A549, Human fetal brain and Human glioma lysates; Mouse brain tissue lysate. Flow

Cyt (intra): A549 cells.

General notes 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  $\mathsf{RabMAb}^{\texttt{®}}$  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 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

1

Purity Tissue culture supernatant

Clonality Monoclonal
Clone number EPR11830

**Isotype** IgG

#### **Applications**

The Abpromise guarantee 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
Flow Cyt (Intra)		1/10 - 1/100.  ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/5000. Predicted molecular weight: 83 kDa.

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

# **Target**

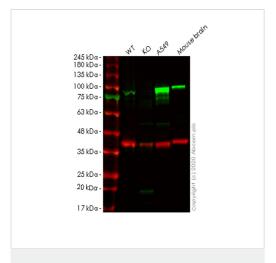
Function
Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes. May be involved in mediating central nervous system effects of therapeutic agents ranging from antidepressants to antiasthmatic and anti-inflammatory agents.

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**



Western blot - Anti-PDE4B antibody [EPR11830] (ab170939)

**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.

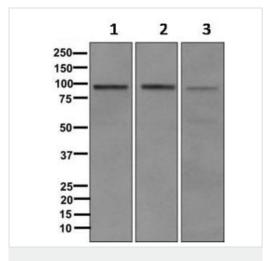
#### Secondary

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

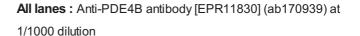
**Predicted band size:** 83 kDa **Observed band size:** 83 kDa

**Lanes 1-4:** Merged signal (red and green). Green - ab170939 observed at 83 kDa. Red - loading control <u>ab8245</u> 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 <a href="mailto:ab265259">ab265259</a> (knockout cell lysate <a href="mailto:ab257576">ab257576</a>) was used. Wild-type and PDE4B knockout samples were subjected to SDS-PAGE. ab170939 and Anti-GAPDH antibody [6C5] - Loading Control (<a href="mailto:ab8245">ab8245</a>) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-PDE4B antibody [EPR11830] (ab170939)



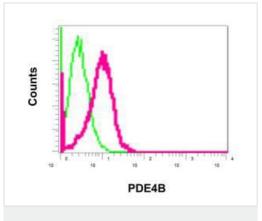
Lane 1 : Human fetal brain lysates

Lane 2: Human glioma lysates

Lane 3: A549 lysates

Lysates/proteins at 10 µg per lane.

Predicted band size: 83 kDa



Flow Cytometry (Intracellular) - Anti-PDE4B antibody [EPR11830] (ab170939)

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



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