abcam

Product datasheet

Anti-pan PDE4 antibody [EPR25202-101] ab300108

重组 RabMAb

12 图像

概述

产品名称	Anti-pan PDE4抗体[EPR25202-101]
描述	兔单克隆抗体[EPR25202-101] to PDE4
宿主	Rabbit
经测试应用	**适用于:** WB, ICC/IF, Dot blot, IHC-Fr, IHC-P, Flow Cyt (Intra) **不适用于:** IP
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HeLa whole cell lysate; mouse and rat cerebellum and brain tissue lysates. DB: human PDE4A/B/C/D fragment. IHC-P: Human, mouse, and rat cerebrum FFPE tissue sections. IHC-Fr: Rat and mouse cerebrum fresh frozen tissues. ICC/IF: HeLa cells, mouse and rat primary neurons. Flow Cyt (Intra): K-562 and HeLa cells.
常规说明	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**.

性能

形式	Liquid
存放说明	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.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆

克隆编号	EPR25202-101
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用**ab300108**于以下的**经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/1000. Detects a band of approximately 60-100 kDa (predicted molecular weight: 91 kDa).
ICC/IF		1/100.
Dot blot		1/1000.
IHC-Fr		1/50.
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		1/5000.

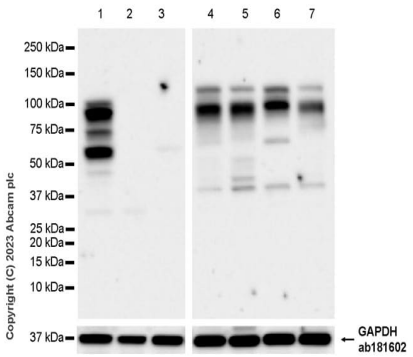
应用说明 Is unsuitable for IP.

靶标

相关性 The cAMP-specific Phosphodiesterase type 4 (PDE4) family is comprised of 4 genes (PDE4 A, B, C and D) with multiple splice variants generated by RNA splicing and use of alternate initiation sites. The cAMP-dependent protein kinase A modulates the enzyme activity of some PDE4 family members by phosphorylation / dephosphorylation mechanisms. Such short-term regulatory mechanisms are necessary for rapid changes in the cAMP levels in cells. PDE4 family selective inhibitor, rolipram inhibits all members of the PDE4 family. In rodents inhibition of PDE4 enzymes by rolipram attenuated short- and long-term memory impairment produced by the administration of scopolamine and MK801. Interaction of these enzymes with cellular scaffolding proteins plays important role in PDE4 compartmentalization and cAMP-dependent signaling.

细胞定位 Cell Membrane

图片



Western blot - Anti-pan PDE4 antibody [EPR25202-101] (ab300108)

All lanes : Anti-pan PDE4 antibody [EPR25202-101] (ab300108) at 1/1000 dilution

Lane 1 : HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate
Lane 2 : K562 (human chronic myelogenous leukemia lymphoblast) whole cell lysate
Lane 3 : DU 145 (human prostate carcinoma epithelial cell) whole cell lysate
Lane 4 : Mouse brain tissue lysate
Lane 5 : Mouse cerebellum tissue lysate
Lane 6 : Rat brain tissue lysate
Lane 7 : Rat cerebellum tissue lysate

Lysates/proteins at 50 µg per lane.

Secondary
All lanes : VeriBlot for IP Detection Reagent (HRP) (**ab131366**) at 1/1000 dilution

Predicted band size: 91 kDa
Observed band size: 60-100 kDa

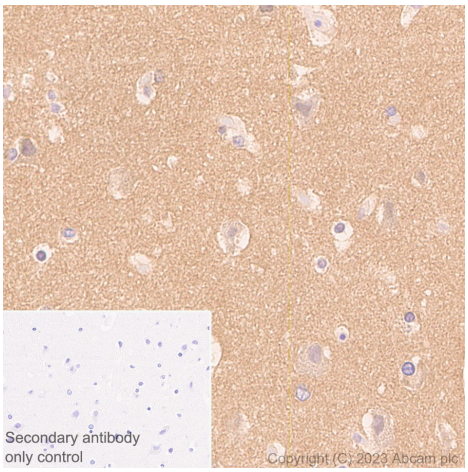
Exposure time: 59 seconds

ab181602 was used as the Loading Control at 1/200000 dilution.

Blocking/Diluting buffer and concentration: 5% NFDM/TBS

Low expression: DU145 (PMID: 24518597), K562.

The molecular weight observed is consistent with what has been described in the literature (PMID:9880581, 15717866).

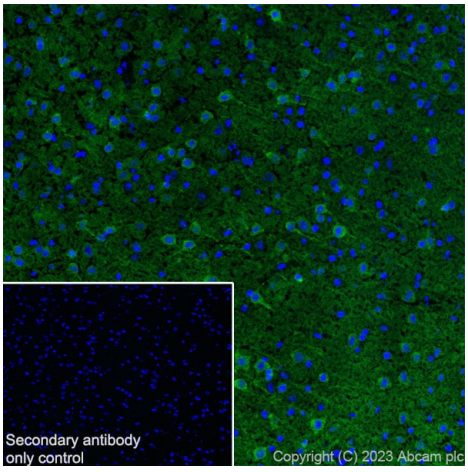


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan PDE4 antibody [EPR25202-101] (ab300108)

Immunohistochemical analysis of paraffin-embedded human cerebrum tissue labeling pan PDE4 with ab300108 at 1/500 (1.044 µg/ml) followed by a Leica DS9800 (Bond™ Polymer Refine Detection). Positive staining on human cerebrum. The section was incubated with ab300108 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is Leica DS9800 (Bond™ Polymer Refine Detection) kit.

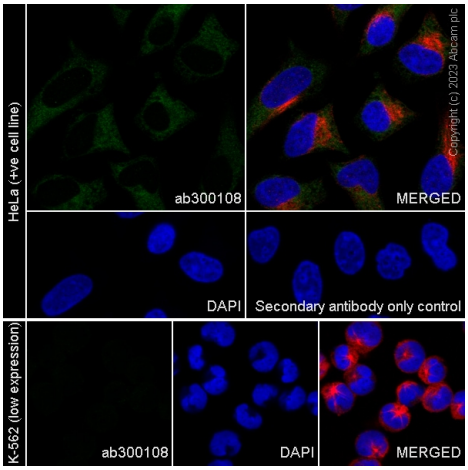
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunohistochemistry (Frozen sections) - Anti-pan PDE4 antibody [EPR25202-101] (ab300108)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen mouse cerebrum (fresh) tissue labeling pan PDE4 with ab300108 at 1/50 (10.44 µg/ml) dilution followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 µg/mL) dilution (Green). Confocal image showing positive staining on mouse cerebrum. The nuclear counterstain was DAPI (Blue). The section was incubated with ab300108 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Secondary antibody control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 µg/mL) dilution.

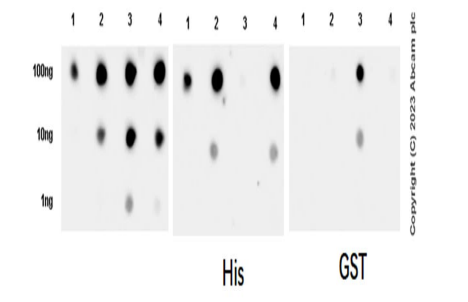


Immunocytochemistry/ Immunofluorescence - Anti-pan PDE4 antibody [EPR25202-101] (ab300108)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling pan PDE4 with ab300108 at 1/50 (10.44 µg/ml) dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 µg/ml) dilution (green). Confocal image showing cytoplasmic staining in HeLa cell line.

Low expression: K-562.
Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5µg/ml) dilution (red). The Nuclear counterstain was DAPI (blue).

Secondary antibody only control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/ml) dilution.



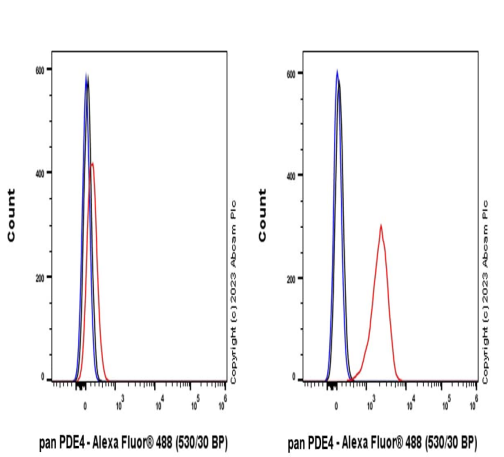
Dot Blot - Anti-pan PDE4 antibody [EPR25202-101] (ab300108)

Dot blot analysis of pan PDE4 using ab300108 at 1/1000 (0.522 µg/ml) followed by a Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/100,000 dilution.

Exposure time: 8 seconds

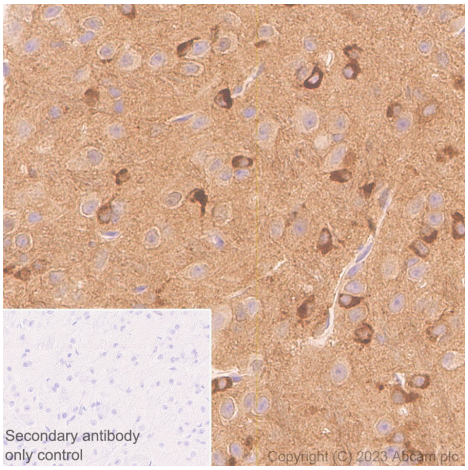
Blocking and diluting buffer and concentration: 5% NFDM/TBST

Lane 1: His-tagged human PDE4A fragment
Lane 2: His-tagged human PDE4B fragment
Lane 3: GST-tagged human PDE4C fragment
Lane 4: His-tagged human PDE4D fragment



Flow Cytometry (Intracellular) - Anti-pan PDE4 antibody [EPR25202-101] (ab300108)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized K-562 (human chronic myelogenous leukemia lymphoblast, Left) HeLa (human cervix adenocarcinoma epithelial cell, Right) cells labeling pan PDE4 with ab300108 at 1/5000 dilution (0.01ug) (red) compared with a Rabbit monoclonal IgG (**ab172730**) (black) isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, **ab150081**) at 1/5000 dilution was used as the secondary antibody. Low expression: K-562.

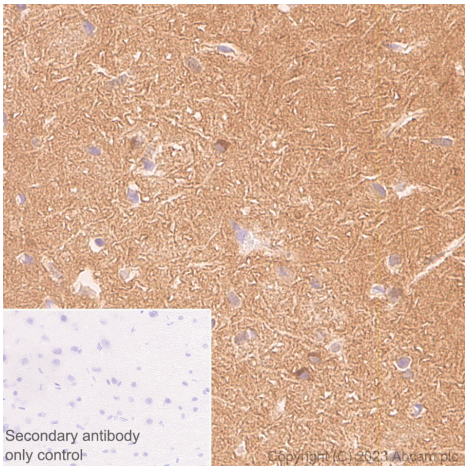


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan PDE4 antibody [EPR25202-101] (ab300108)

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling pan PDE4 with ab300108 at 1/5000 (0.104 µg/ml) followed by a Leica DS9800 (Bond™ Polymer Refine Detection) kit. Positive staining on mouse cerebrum. The section was incubated with ab300108 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is Leica DS9800 (Bond™ Polymer Refine Detection) kit was used at a ready to use dilution.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

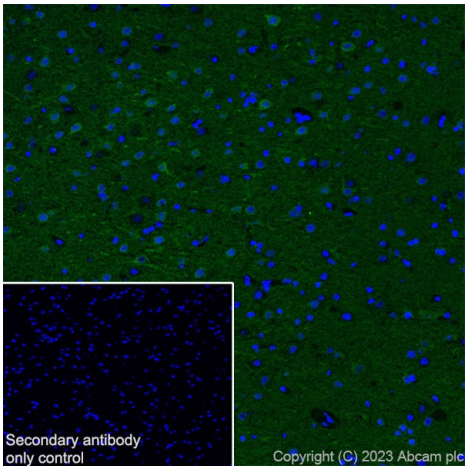


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan PDE4 antibody [EPR25202-101] (ab300108)

Immunohistochemical analysis of paraffin-embedded rat cerebrum tissue labeling pan PDE4 with ab300108 at 1/5000 (0.104 µg/ml) followed by a Leica DS9800 (Bond™ Polymer Refine Detection) kit. Positive staining on rat cerebrum. The section was incubated with ab300108 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is Leica DS9800 (Bond™ Polymer Refine Detection) kit used at a ready to use dilution.

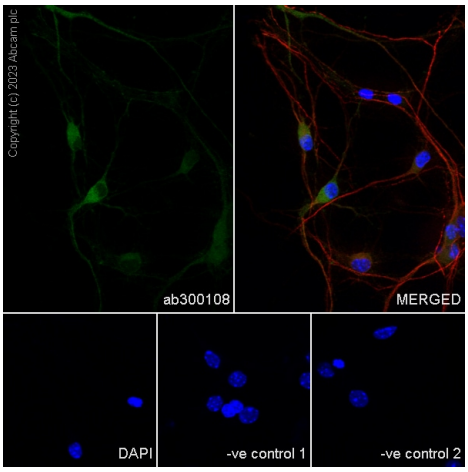
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



Immunohistochemistry (Frozen sections) - Anti-pan PDE4 antibody [EPR25202-101] (ab300108)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen rat cerebrum (fresh) tissue labeling pan PDE4 with ab300108 at 1/50 (10.44 µg/ml) dilution followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/mL) dilution (Green). Confocal image showing positive staining on rat cerebrum. The nuclear counterstain was DAPI (Blue). The section was incubated with ab300108 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

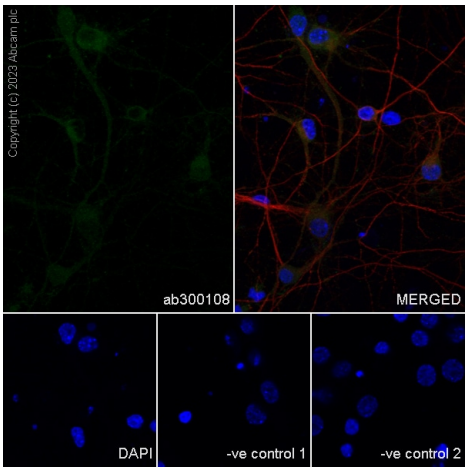
Secondary antibody control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 µg/mL) dilution.



Immunocytochemistry/ Immunofluorescence - Anti-pan PDE4 antibody [EPR25202-101] (ab300108)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neuron labeling pan PDE4 with ab300108 at 1/50 (10.44 µg/ml) dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 µg/ml) dilution (green). Confocal image showing positive staining in mouse primary neuron. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection.
Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). **ab11267** Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/500 (4µg/ml) dilution (red) followed by **ab150120** Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) at 1/1000 dilution. The Nuclear counterstain was DAPI (blue).

-ve control: **ab11267** at 1/500 (4µg/ml) followed by **ab150081** at 1/1000 (2 ug/ml) dilution.



Immunocytochemistry/ Immunofluorescence - Anti-pan PDE4 antibody [EPR25202-101] (ab300108)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized rat primary neuron labeling pan PDE4 with ab300108 at 1/50 (10.44 µg/ml) dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 µg/ml) dilution (green). Confocal image showing positive staining in rat primary neuron. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection.
Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). **ab11267** Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/500 (4µg/ml) dilution (red) followed by **ab150120** Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) at 1/1000 dilution. The Nuclear counterstain was DAPI (blue).

-ve control: **ab11267** at 1/500 (4µg/ml) followed by **ab150081** at 1/1000 (2 ug/ml) dilution.

Rabbit monoclonal [EPR25202-101] to PDE4D

(ab300108)

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