

Product datasheet

Anti-PKC alpha (phospho T497) antibody [EP2608Y] ab76016

Recombinant RabMAb

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Overview

Product name	Anti-PKC alpha (phospho T497) antibody [EP2608Y]
Description	Rabbit monoclonal [EP2608Y] to PKC alpha (phospho T497)
Host species	Rabbit
Tested applications	Suitable for: Dot blot, WB, IHC-P Unsuitable for: Flow Cyt or ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, NIH/3T3, and C6 whole cell lysates. IHC-P: Human glioma, Mouse kidney, and Rat kidney tissues.
General notes	<p>This product has switched from a hybridoma to recombinant production method on 2nd August 2023.</p> <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. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EP2608Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab76016 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

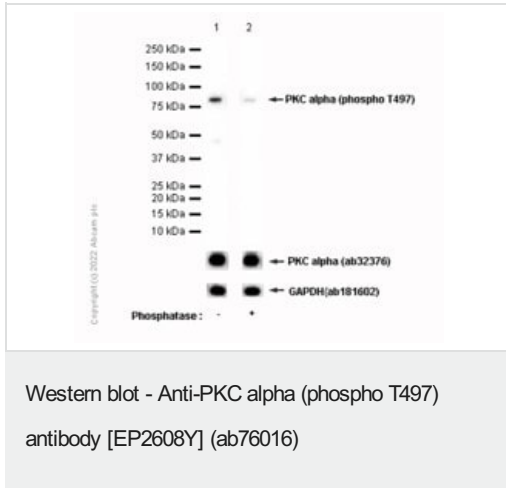
Application	Abreviews	Notes
Dot blot		1/1000.
WB		1/100000. Predicted molecular weight: 77 kDa.
IHC-P		1/10000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Application notes Is unsuitable for Flow Cyt or ICC/IF.

Target

Function	<p>This is a calcium-activated, phospholipid-dependent, serine- and threonine-specific enzyme. May play a role in cell motility by phosphorylating CSPG4.</p> <p>PKC is activated by diacylglycerol which in turn phosphorylates a range of cellular proteins. PKC also serves as the receptor for phorbol esters, a class of tumor promoters.</p>
Sequence similarities	<p>Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily.</p> <p>Contains 1 AGC-kinase C-terminal domain.</p> <p>Contains 1 C2 domain.</p> <p>Contains 2 phorbol-ester/DAG-type zinc fingers.</p> <p>Contains 1 protein kinase domain.</p>
Cellular localization	Cytoplasm. Cell membrane. Nucleus.

Images



All lanes : Anti-PKC alpha (phospho T497) antibody [EP2608Y] (ab76016) at 1/10000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate, then the membrane was incubated with Alkaline phosphatase

Lysates/proteins at 15 µg per lane.

Secondary

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

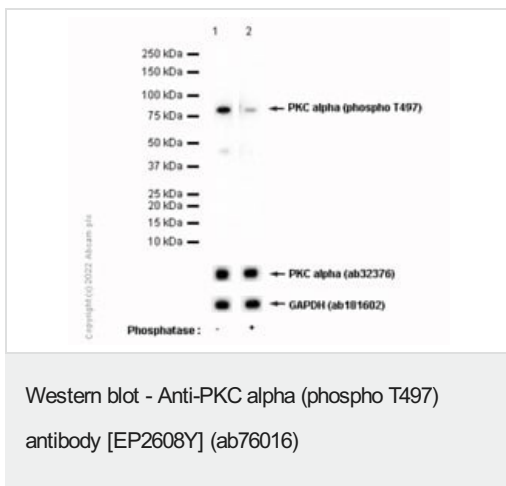
Performed under reducing conditions.

Predicted band size: 77 kDa

Observed band size: 77 kDa

Exposure time: 10 seconds

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



All lanes : Anti-PKC alpha (phospho T497) antibody [EP2608Y] (ab76016) at 1/10000 dilution

Lane 1 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate

Lane 2 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate, then the membrane was incubated with Alkaline phosphatase

Lysates/proteins at 15 µg per lane.

Secondary

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

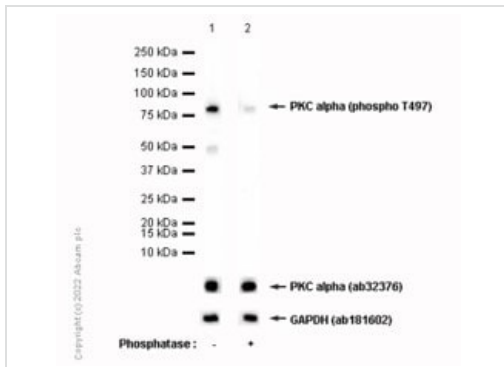
Performed under reducing conditions.

Predicted band size: 77 kDa

Observed band size: 77 kDa

Exposure time: 10 seconds

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



Western blot - Anti-PKC alpha (phospho T497) antibody [EP2608Y] (ab76016)

All lanes : Anti-PKC alpha (phospho T497) antibody [EP2608Y] (ab76016) at 1/10000 dilution

Lane 1 : C6 (Rat glial tumor glial cell) whole cell lysate

Lane 2 : C6 (Rat glial tumor glial cell) whole cell lysate, then the membrane was incubated with Alkaline phosphatase

Lysates/proteins at 15 µg per lane.

Secondary

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

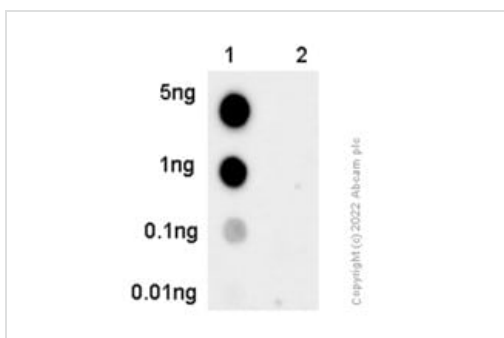
Performed under reducing conditions.

Predicted band size: 77 kDa

Observed band size: 77 kDa

Exposure time: 5 seconds

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



Dot Blot - Anti-PKC alpha (phospho T497) antibody [EP2608Y] (ab76016)

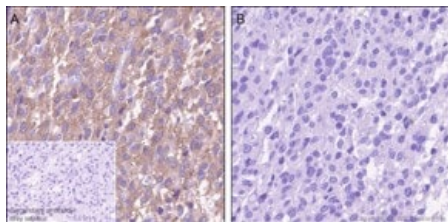
Dot blot analysis of PKC alpha (pT497) using ab76016 at 1:1000 (1.34 ug/ml) followed by a Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1:20000 dilution.

Lane 1: PKC alpha non-phospho peptide.

Lane 2: PKC alpha (phospho T497).

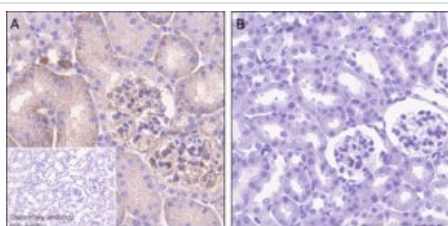
Blocking and diluting buffer: 5% NFDM/TBST.

Exposure time: 10 seconds.



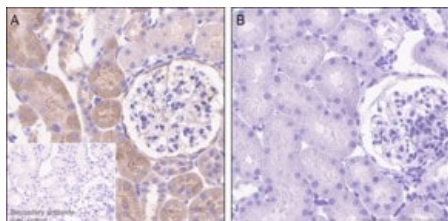
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC alpha (phospho T497) antibody [EP2608Y] (ab76016)

Immunohistochemical analysis of paraffin-embedded Human glioma tissue labeling PKC alpha with ab76016 at 1/10000 (0.134 µg/ml), with or without Lambda phosphatase treatment, then followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on human glioma. No signal was detected when tissue was treated with Lambda phosphatase. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 30 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC alpha (phospho T497) antibody [EP2608Y] (ab76016)

Immunohistochemical analysis of paraffin-embedded Mouse kidney tissue labeling PKC alpha with ab76016 at 1/10000 (0.134 µg/ml), with or without Lambda phosphatase treatment, then followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on Mouse kidney. No signal was detected when tissue was treated with Lambda phosphatase. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 30 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC alpha (phospho T497) antibody [EP2608Y] (ab76016)

Immunohistochemical analysis of paraffin-embedded Rat kidney tissue labeling PKC alpha with ab76016 at 1/10000 (0.134 µg/ml), with or without Lambda phosphatase treatment, then followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on Rat kidney. No signal was detected when tissue was treated with Lambda phosphatase. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 30 mins.

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