

Product datasheet

Anti-PKC alpha (phospho S657) antibody [EPR1901(2)] ab180848

Recombinant RabMAb

[19 References](#) [7 Images](#)

Overview

Product name	Anti-PKC alpha (phospho S657) antibody [EPR1901(2)]
Description	Rabbit monoclonal [EPR1901(2)] to PKC alpha (phospho S657)
Host species	Rabbit
Specificity	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat. ab180848 detects various PKC phosphorylated isoforms
Tested applications	Suitable for: Dot blot, IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: NIH/3T3, C6 (rat glioma, treated with 80nM Phorbol-12-myristate-13-acetate), and Jurkat (human acute T cell leukemia, treated with 200ng/ml phorbol-12,13-dibutyrate for 45 minutes) cell lysates. IHC-P: Human prostatic hyperplasia tissue. Dot: PKC alpha (pS657) phospho peptide.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <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 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 .

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	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1901(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab180848 in the following tested applications.

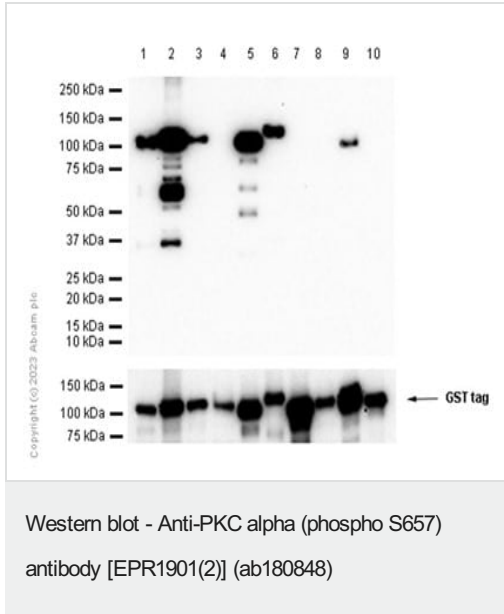
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Dot blot		1/1000.
IHC-P		1/5000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. The use of an HRP/AP polymerized secondary antibody is recommended. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
WB		1/1000. Predicted molecular weight: 77 kDa.

Target

Function	This is a calcium-activated, phospholipid-dependent, serine- and threonine-specific enzyme. May play a role in cell motility by phosphorylating CSPG4. 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.
Sequence similarities	Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily. Contains 1 AGC-kinase C-terminal domain. Contains 1 C2 domain. Contains 2 phorbol-ester/DAG-type zinc fingers. Contains 1 protein kinase domain.
Cellular localization	Cytoplasm. Cell membrane. Nucleus.

Images



All lanes : Anti-PKC alpha (phospho S657) antibody [EPR1901(2)] (ab180848) at 1/1000 dilution

Lane 1 : Recombinant human PKC alpha protein (Active) ([ab55672](#))

Lane 2 : Recombinant human PKC beta 1 protein ([ab60840](#))

Lane 3 : Recombinant human PKC beta 2 protein ([ab60841](#))

Lane 4 : Recombinant human PKC gamma protein ([ab60842](#))

Lane 5 : Recombinant human PKC delta protein ([ab60844](#))

Lane 6 : Recombinant human PKC epsilon protein ([ab60847](#))

Lane 7 : Recombinant human PKC zeta protein ([ab60848](#))

Lane 8 : Recombinant human PKC eta protein ([ab60849](#))

Lane 9 : Recombinant human PKC theta/PRKCQ protein ([ab56641](#))

Lane 10 : Recombinant human PKC iota protein ([ab60850](#))

Secondary

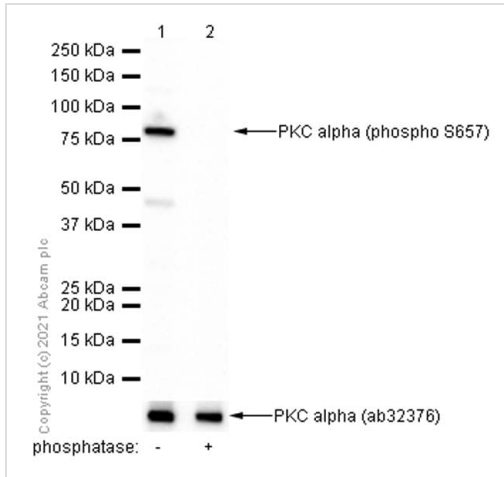
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 77 kDa

Observed band size: 105 kDa

Exposure time: 20 seconds

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



Western blot - Anti-PKC alpha (phospho S657) antibody [EPR1901(2)] (ab180848)

All lanes : Anti-PKC alpha (phospho S657) antibody [EPR1901(2)] (ab180848) at 1/1000 dilution (Purified)

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

Lane 2 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

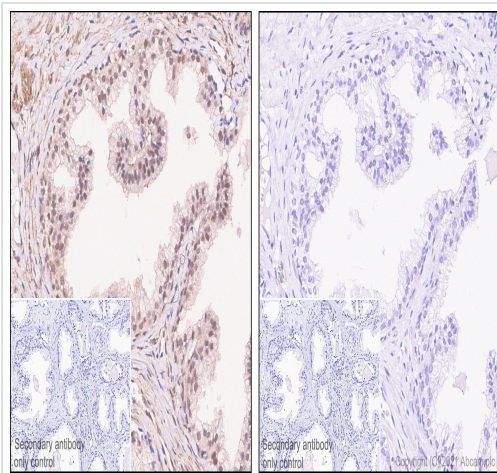
Lysates/proteins at 15 µg per lane.

Secondary

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

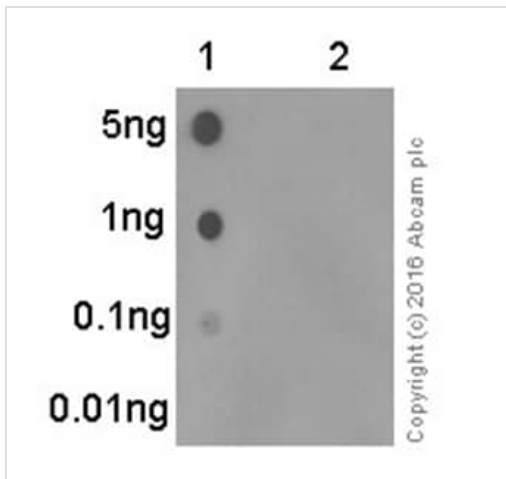
Predicted band size: 77 kDa

Observed band size: 77 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC alpha (phospho S657) antibody [EPR1901(2)] (ab180848)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human prostatic hyperplasia tissue sections labeling PKC alpha with purified ab180848 at 1:5000 (0.23 µg/ml). Heat mediated antigen retrieval was performed using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control. Positive staining on human prostatic hyperplasia without alkaline phosphatase treatment (image A). No staining on human prostatic hyperplasia with alkaline phosphatase treatment (image B). The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

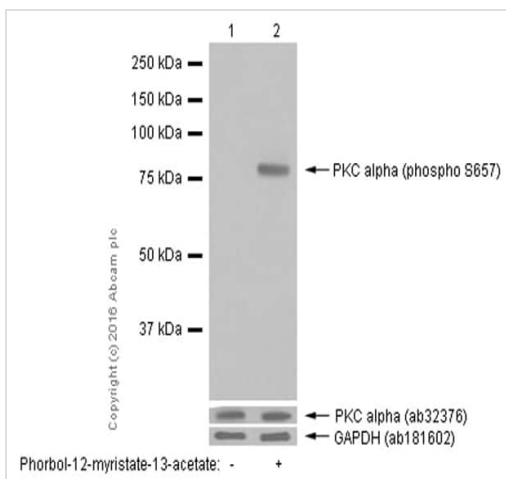


Dot Blot - Anti-PKC alpha (phospho S657) antibody [EPR1901(2)] (ab180848)

Dot blot analysis of PKC alpha (pS657) phospho peptide (Lane 1) and PKC alpha non-phospho peptide (Lane 2) using ab180848 at 1/1000 dilution followed by Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/100000 dilution.

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

Exposure time: 10 seconds.



Western blot - Anti-PKC alpha (phospho S657) antibody [EPR1901(2)] (ab180848)

All lanes : Anti-PKC alpha (phospho S657) antibody [EPR1901(2)] (ab180848) at 1/10000 dilution

Lane 1 : Untreated C6 (rat glioma) whole cell lysate

Lane 2 : C6 (rat glioma) treated with 80nM Phorbol-12-myristate-13-acetate, whole cell lysate

Lysates/proteins at 15 µg per lane.

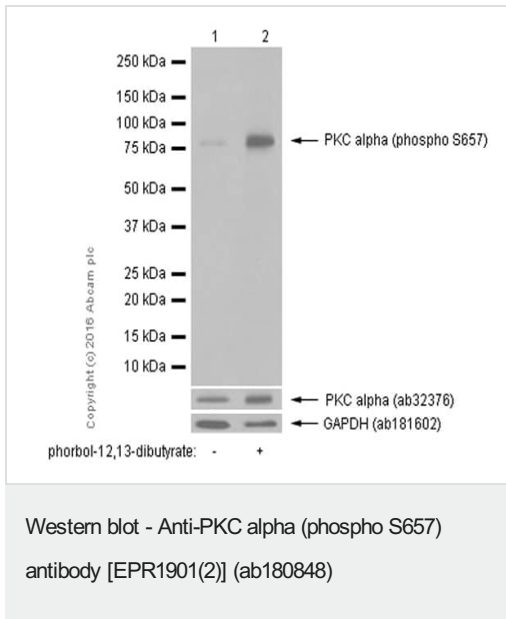
Secondary

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

Predicted band size: 77 kDa

Additional bands at: 77 kDa. We are unsure as to the identity of these extra bands.

Blocking and diluting buffer: 5% NFDM/TBST



All lanes : Anti-PKC alpha (phospho S657) antibody [EPR1901(2)] (ab180848) at 1/10000 dilution

Lane 1 : Untreated Jurkat (human acute T cell leukemia) whole cell lysate

Lane 2 : Jurkat (human acute T cell leukemia) treated with 200ng/ml phorbol-12,13-dibutyrate for 45 minutes, whole cell lysate

Lysates/proteins at 15 µg per lane.

Secondary





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

Predicted band size: 77 kDa

Additional bands at: 77 kDa. We are unsure as to the identity of these extra bands.

Blocking and diluting buffer: 5% NFD/MTBST

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-PKC alpha (phospho S657) antibody [EPR1901(2)] (ab180848)

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

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