abcam

ab32376

Anti-PKC alpha antibody [Y124]

Anti-PKC alpha antibody [Y124] (ab32376) is a rabbit monoclonal antibody detecting PKC alpha in **Western Blot, Flow Cytometry (Intra), IP, IHC-P, ICC/IF**. Suitable for **Human, Mouse, Pig, Rat**.

- KO validated for confirmed specificity
- Biophysical QC for unrivalled batch-batch consistency
- Over 110 publications
- Trusted since 2006

Recombinant | RabMAb | KO Validated | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	Y124
Purification technique	Affinity purification Protein A
Concentration	0.104 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/20
Notes	**For unpurified use at 1/100.**

Expected

Species	Mouse, Rat, Pig
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Goldfish
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000 - 1/10000
Notes	-

Species	Rat
Dilution info	1/1000 - 1/10000
Notes	-

Species	Pig
Dilution info	1/1000 - 1/10000

Notes	-

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Species	Recombinant full length protein - Human
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Goldfish
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/200
Notes	Treatment with 200nM PMA for 30 minutes induces translocation of PKC alpha to the membrane.

Expected

Species	Mouse, Rat, Pig
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Goldfish
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/20
Notes	For unpurified use at 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

Species	Mouse, Rat, Pig
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Goldfish
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/100
Notes	**For unpurified use at 1/250 - 1/500.** Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/100
Notes	**For unpurified use at 1/250 - 1/500.** Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Human
Dilution info	1/100
Notes	**For unpurified use at 1/250 - 1/500.** Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Expected

Species	Pig
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Goldfish
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Target data

See full target information PRKCA

Function

Calcium-activated, phospholipid- and diacylglycerol (DAG)-dependent serine/threonine-protein kinase that is involved in positive and negative regulation of cell proliferation, apoptosis, differentiation, migration and adhesion, tumorigenesis, cardiac hypertrophy, angiogenesis, platelet function and inflammation, by directly phosphorylating targets such as RAF1, BCL2, CSPG4, TNNT2/CTNT, or activating signaling cascade involving MAPK1/3 (ERK1/2) and RAP1GAP. Involved in cell proliferation and cell growth arrest by positive and negative regulation of the cell cycle. Can promote cell growth by phosphorylating and activating RAF1, which mediates the activation of the MAPK/ERK signaling cascade, and/or by up-regulating CDKN1A, which facilitates active cyclin-dependent kinase (CDK) complex formation in glioma cells. In intestinal cells stimulated by the phorbol ester PMA, can trigger a cell cycle arrest program which is associated with the accumulation of the hyper-phosphorylated growth-suppressive form of RB1 and induction of the CDK inhibitors CDKN1A and CDKN1B. Exhibits anti-apoptotic function in glioma cells and protects them from apoptosis by suppressing the p53/TP53-mediated activation of IGFBP3, and in leukemia cells mediates anti-apoptotic action by phosphorylating BCL2. During macrophage differentiation induced by macrophage colony-stimulating factor (CSF1), is translocated to the nucleus and is associated with macrophage development. After wounding, translocates from focal contacts to lamellipodia and participates in the modulation of desmosomal adhesion. Plays a role in cell motility by phosphorylating CSPG4, which induces association of CSPG4 with extensive lamellipodia at the cell periphery and polarization of the cell accompanied by increases in cell motility. During chemokine-induced CD4(+) T cell migration, phosphorylates CDC42-guanine exchange factor DOCK8 resulting in its dissociation from LRCH1 and the activation of GTPase CDC42 (PubMed:28028151). Is highly expressed in a number of cancer cells where it can act as a tumor promoter and is implicated in malignant phenotypes of several tumors such as gliomas and breast cancers. Negatively regulates myocardial contractility and positively regulates angiogenesis, platelet aggregation and thrombus formation in arteries. Mediates hypertrophic growth of neonatal cardiomyocytes, in part through a MAPK1/3 (ERK1/2)-dependent signaling pathway, and upon PMA treatment, is required to induce cardiomyocyte hypertrophy up to heart failure and death, by increasing protein synthesis, protein-DNA ratio and cell surface area. Regulates cardiomyocyte function by phosphorylating cardiac troponin T (TNNT2/CTNT), which induces significant reduction in actomyosin ATPase activity, myofilament calcium sensitivity and myocardial contractility. In angiogenesis, is required for full endothelial cell migration, adhesion to vitronectin (VTN), and vascular endothelial growth factor A (VEGFA)-dependent regulation of kinase activation and vascular tube formation. Involved in the stabilization of VEGFA mRNA at post-transcriptional level and mediates VEGFA-induced cell proliferation. In the regulation of calcium-induced platelet aggregation, mediates signals from the CD36/GP4 receptor for granule release, and activates the integrin heterodimer ITGA2B-ITGB3 through the RAP1GAP pathway for adhesion. During response to lipopolysaccharides (LPS), may regulate selective LPS-induced macrophage functions involved in host defense and inflammation. But in some inflammatory responses, may negatively regulate NF-kappa-B-induced genes, through IL1A-dependent induction of NF-kappa-B inhibitor alpha (NFKBIA/IKBA). Upon stimulation with 12-O-tetradecanoylphorbol-13-acetate (TPA), phosphorylates EIF4G1, which modulates EIF4G1 binding to MKNK1 and may be involved in the

regulation of EIF4E phosphorylation. Phosphorylates KIT, leading to inhibition of KIT activity. Phosphorylates ATF2 which promotes cooperation between ATF2 and JUN, activating transcription. Phosphorylates SOCS2 at 'Ser-52' facilitating its ubiquitination and proteasomal degradation (By similarity). Phosphorylates KLHL3 in response to angiotensin II signaling, decreasing the interaction between KLHL3 and WNK4 (PubMed:25313067). Phosphorylates and activates LRRK1, which phosphorylates RAB proteins involved in intracellular trafficking (PubMed:36040231).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

What is this antibody validated in?
Anti-PKC alpha antibody [Y124] (ab32376) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunoprecipitation (IP), Immunohistochemistry (IHC-P), Immunocytochemistry/immunofluorescence (ICC/IF) in Human, Mouse, Pig, Rat samples.

What is the molecular weight of PKC alpha?
Anti-PKC alpha [Y124] (ab32376) specifically detects a band for PKC alpha (UniProt: P17252) at a molecular weight of 77kDa.

Trusted by the scientific community
Anti-PKC alpha [Y124] (ab32376) was first used in a scientific publication in 2006 and has been cited over 110 times in peer-reviewed journals.

Reviewed by scientists
Anti-PKC alpha [Y124] (ab32376) has over 10 independent reviews from customers.

Specificity confirmed
The specificity of Anti-PKC alpha antibody [Y124] (ab32376) has been confirmed by Western blot testing in PRKCA Knockout HAP1 cells.

Other related products

We have a range of other formats of antibody clone [Y124] also available for your convenience: ab32376, Alexa Fluor® 488 - ab204633, Alexa Fluor® 647 - ab204634, HRP - ab205422, Alexa Fluor® 594 - ab206344, Alexa Fluor® 405 - ab206345, PE - ab208749, Carrier free - ab221611

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Trial sizes available!
Test your antibody or perform pre-screening before committing to a larger quantity. Sold in 20µl. Discover our selection of trial-size antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	PKC alpha known as Protein Kinase C alpha is a serine/threonine-specific protein kinase involved in various cellular processes. The molecular mass of PKC alpha is approximately 80 kDa. Alternately called PKCA or PRKC alpha it is expressed in many tissues with high expression in the brain heart and lungs. PKC alpha plays a role in signal transduction by phosphorylating serine and threonine residues on target proteins.
Biological function summary	PKC alpha regulates cellular functions including proliferation differentiation and apoptosis. It often acts as part of a larger protein complex modulating various biological responses by interacting with substrates and co-factors. Its activity is dependent on calcium ions and diacylglycerol emphasizing its role in calcium and lipid signaling pathways.
Pathways	PKC alpha plays a vital role in the MAPK/ERK pathway and the PI3K/AKT pathway which are critical for the cellular stress response and growth regulation. PKC alpha interacts with several proteins in these pathways including RAF1 and AKT1 facilitating signal transmission that influences cell fate decisions.
Associated diseases and disorders	PKC alpha has been implicated in cancer and cardiac hypertrophy. In cancers aberrant PKC alpha signaling is linked to increased cell proliferation and survival. In cardiac hypertrophy it is associated with abnormal heart growth due to impaired signaling involving AKT1 and GSK3B. These connections highlight PKC alpha's influence in pathological as well as physiological conditions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

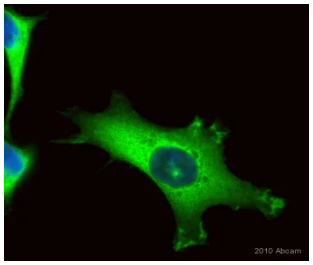
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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19 product images

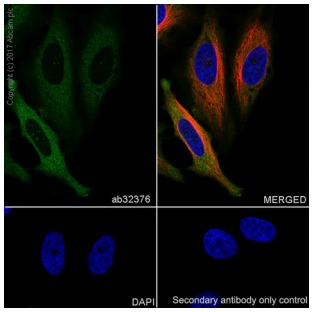


This image is courtesy of an anonymous customer review

Immunocytochemistry/ Immunofluorescence - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PKC alpha antibody

ab32376 staining PKC in the HT1080 Cell line by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody (1/400 in PBS) for 1 hour at 22°C. An Alexa Fluor® 488-conjugated Goat anti-rabbit IgG polyclonal was used as the secondary antibody (1/1000).

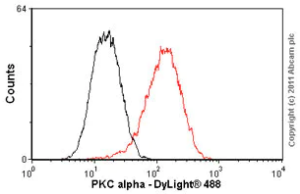


Immunocytochemistry/ Immunofluorescence - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PKC alpha antibody

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling PKC alpha with Purified ab32376 at 1:250 dilution (0.4µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were

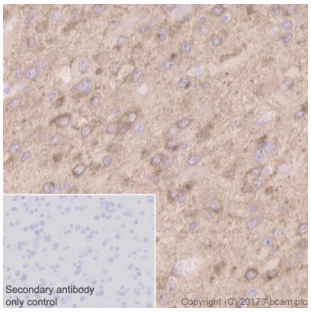
counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). ab150077 Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Flow Cytometry (Intracellular) staining using rabbit Anti-PKC alpha antibody

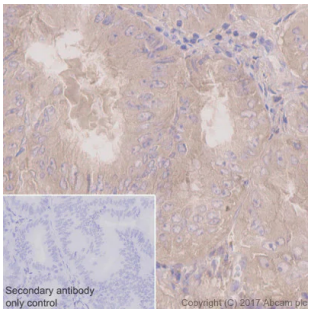
Overlay histogram showing HeLa cells stained with unpurified ab32376 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab32376, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit monoclonal IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with methanol (5 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PKC alpha antibody

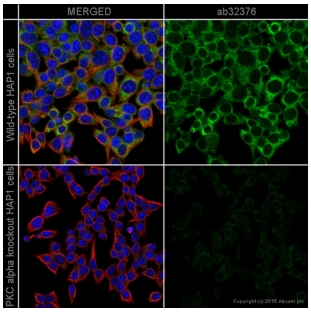
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human glioma tissue sections labeling PKC alpha with purified ab32376 at 1:100 dilution (1.01 µg/ml). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using EDTA Buffer, pH9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PKC alpha antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human endometrium carcinoma tissue sections labeling PKC alpha with purified ab32376 at 1:100 dilution (1.01 µg/ml). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using EDTA Buffer, pH9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.

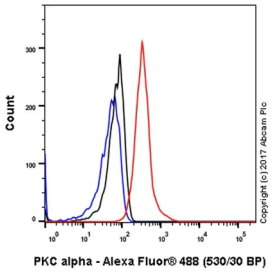


Immunocytochemistry/ Immunofluorescence - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PKC alpha antibody

Unpurified ab32376 staining PKCα in wild-type HAP1 cells (top panel) and PKCα in knockout HAP1 cells (bottom panel). In untreated conditions, PKCα is expressed in the cytoplasm of the cells. The cells were then fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab32376 at 1/200 dilution and ab7291 at 1ug/ml concentration overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Rabbit IgG (Alexa Fluor® 488) (ab150081) at 2 µg/ml (shown in green) and a goat secondary antibody to Mouse IgG (Alexa Fluor® 594) (ab150117) at 2ug/ml (shown in pseudo-color red). Nuclear DNA was labelled in blue with DAPI.
This product also gave a positive signal under the same testing conditions in HAP1 cells fixed with 4% formaldehyde (10 min).

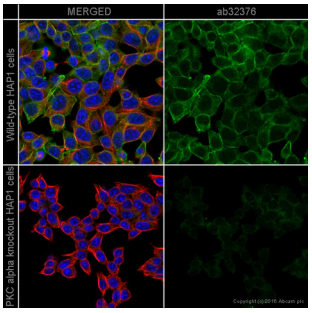
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Flow Cytometry (Intracellular) - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Flow Cytometry (Intracellular) staining using rabbit Anti-PKC alpha antibody

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling PKC alpha with purified ab32376 at 1/20 dilution (5 ug/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluorr® 488) secondary antibody was used at 1/2000 dilution. Isotype control - 90% methanol. Unlabeled control - Rabbit monoclonal IgG (Black). Cell without incubation with primary antibody and secondary antibody (Blue).

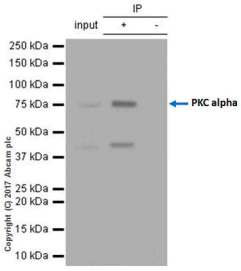


Immunocytochemistry/ Immunofluorescence - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PKC alpha antibody

Unpurified ab32376 staining PKCα in 200nM PMA-treated wild-type HAP1 cells (top panel) and PKCα in 200nM PMA-treated knockout HAP1 cells (bottom panel). The cells were treated with 200nM PMA for 30 minutes to induce translocation of PKCα to the cell membrane. The cells were then fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab32376 at 1/200 dilution and ab7291 at 1ug/ml concentration overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Rabbit IgG (Alexa Fluor® 488) (ab150081) at 2 µg/ml (shown in green) and a goat secondary antibody to Mouse IgG (Alexa Fluor® 594) (ab150117) at 2ug/ml (shown in pseudo-color red). Nuclear DNA was labelled in blue with DAPI.
This product also gave a positive signal under the same testing conditions in HAP1 cells fixed with 4% formaldehyde (10 min).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Immunoprecipitation - Anti-PKC alpha antibody [Y124] (ab32376)

ab32376 (purified) at 1:20 dilution (0.5ug) immunoprecipitating PKC alpha in 293 (Human embryonic kidney epithelial cell) whole cell lysate.

Lane 1 (input): 293 (Human embryonic kidney epithelial cell) whole cell lysate 10ug

Lane 2 (+): ab32376 & 293 (Human embryonic kidney epithelial cell) whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab32376 in 293 (Human embryonic kidney epithelial cell) whole cell lysate

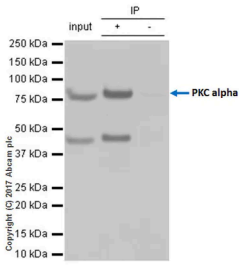
For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.
The band between 37kDa and 50kDa might be the C-term fragment. (PMID:10381525)

All lanes:
Immunoprecipitation - Anti-PKC alpha antibody [Y124] (ab32376)

Predicted band size: 76 kDa

Immunoprecipitation - Anti-PKC alpha antibody [Y124] (ab32376)



ab32376 (purified) at 1:20 dilution (0.5ug) immunoprecipitating PKC alpha in Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate.

Lane 1 (input): Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate 10ug

Lane 2 (+): ab32376 & Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab32376 in Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.

The band between 37kDa and 50kDa might be the C-term fragment. (PMID:10381525)

All lanes:
Immunoprecipitation - Anti-PKC alpha antibody [Y124] (ab32376)

Predicted band size: 76 kDa

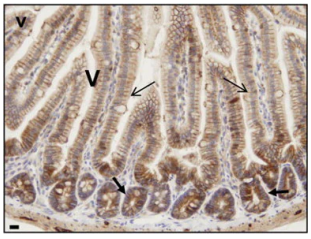
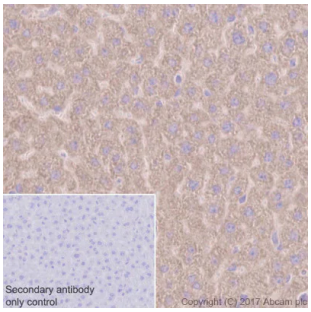


Image from Hao F et al., J Biol Chem. 2011 May 20;286(20):18104-17. Epub 2011 Mar 18. Fig 1.; doi: 10.1074/jbc.M110.208488; May 20, 2011 The Journal of Biological Chemistry, 286, 18104-18117.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PKC alpha antibody

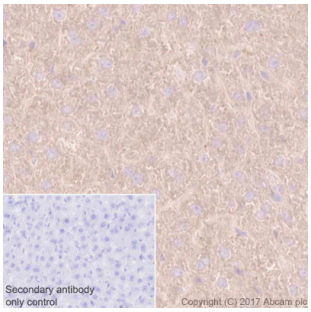
Immunohistochemical analysis of mouse small intestine tissue, staining PKC alpha with unpurified ab32376.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PKC alpha antibody

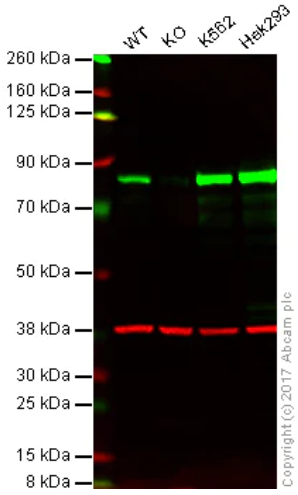
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse liver tissue sections labeling PKC alpha with purified ab32376 at 1:100 dilution (1.01 µg/ml). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using EDTA Buffer, pH9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PKC alpha antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat liver tissue sections labeling PKC alpha with purified ab32376 at 1:100 dilution (1.01 µg/ml). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using EDTA Buffer, pH9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



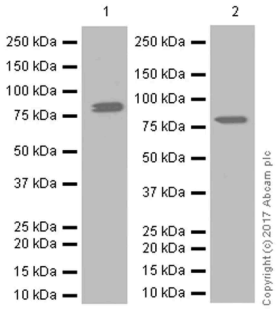
Western blot - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Western blot staining using rabbit Anti-PKC alpha antibody

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: PKC alpha knockout HAP1 cell lysate (20 µg)
Lane 3: K562 cell lysate (20 µg)
Lane 4: HEK293 cell lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab32376 observed at 77 kDa. Red - loading control, ab8245, observed at 37 kDa.
ab32376 was shown to specifically react with PKC alpha in wild-type HAP1 cells. No band was observed when PKC alpha knockout samples were examined. Wild-type and PKC alpha knockout samples were subjected to SDS-PAGE. ab32376 and ab8245 (loading control to GAPDH) were diluted 1/5000 and 1/1000 respectively and incubated overnight at 4°C. 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 1/10,000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-PKC alpha antibody [Y124] (ab32376)

Predicted band size: 76 kDa



Western blot - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Western blot staining using rabbit Anti-PKC alpha antibody

Blocking and diluting buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-PKC alpha antibody [Y124] (ab32376) at 1/5000 dilution

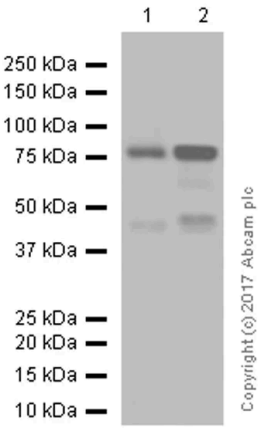
Lane 1:
293 (Human embryonic kidney epithelial cell) whole cell lysates at 15 µg

Lane 2:
NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates at 15 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size: 76 kDa



Western blot - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Western blot staining using rabbit Anti-PKC alpha antibody

Blocking and diluting buffer: 5% NFDM/TBST
The band between 37kDa and 50kDa might be the C-term fragment. (PMID:10381525)
All lanes:
Western blot - Anti-PKC alpha antibody [Y124] (ab32376) at 1/10000 dilution

Lane 1:
K562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysates at 20 µg

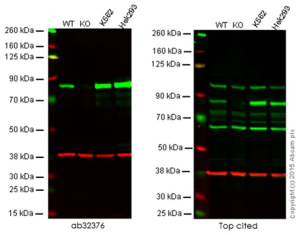
Lane 2:
HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates at 20 µg

Secondary

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

Predicted band size: 76 kDa

Observed band size: 80 kDa



Western blot - Anti-PKC alpha antibody [Y124] (ab32376)

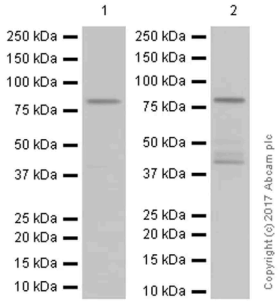
PKC alpha Western blot staining using rabbit Anti-PKC alpha antibody

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: PKC alpha knockout HAP1 cell lysate (20 µg)
Lane 3: K562 cell lysate (20 µg)
Lane 4: HEK293 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - unpurified ab32376 observed at 77 kDa. Red - loading control, ab8245, observed at 37 kDa.

This western blot image is a comparison between ab32376 and a competitor's top cited rabbit polyclonal antibody.
All lanes:
Western blot - Anti-PKC alpha antibody [Y124] (ab32376)

Predicted band size: 76 kDa



Western blot - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Western blot staining using rabbit Anti-PKC alpha antibody

Blocking and diluting buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-PKC alpha antibody [Y124] (ab32376) at 1/5000 dilution

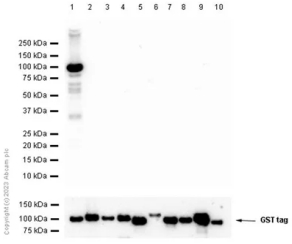
Lane 1:
C6 (Rat glial tumor glial cell) whole cell lysates at 15 µg

Lane 2:
Pig skeletal muscle lysates at 15 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size: 76 kDa



Western blot - Anti-PKC alpha antibody [Y124] (ab32376)

PKC alpha Western blot staining using rabbit Anti-PKC alpha antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
All lanes:
Western blot - Anti-PKC alpha antibody [Y124] (ab32376) at 1/2000 dilution

Lane 1:
Western blot - Recombinant human PKC alpha protein (Active) (GST tag N-Terminus) (ab55672)

Lane 2:
Western blot - Recombinant human PKC beta 1 protein (GST tag N-Terminus) (ab60840)

Lane 3:
Western blot - Recombinant human PKC beta 2 protein (GST tag N-Terminus) (ab60841)

Lane 4:
Western blot - Recombinant human PKC gamma protein (GST tag N-Terminus) (ab60842)

Lane 5:
Western blot - Recombinant human PKC delta protein (GST tag N-Terminus) (ab60844)

Lane 6:
Western blot - Recombinant human PKC epsilon protein (GST tag N-Terminus) (ab60847)

Lane 7:
Western blot - Recombinant human PKC zeta protein (GST tag N-Terminus) (ab60848)

Lane 8:

Western blot - Recombinant human PKC eta protein (GST tag N-Terminus) (ab60849)

Lane 9:
Western blot - Recombinant human PKC theta/PRKCQ protein (GST tag N-Terminus) (ab56641)

Lane 10:
Western blot - Recombinant human PKC iota protein (GST tag N-Terminus) (ab60850)

Secondary

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

Predicted band size: 76 kDa

Observed band size: 105 kDa

Exposure time: 20s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.