

Product datasheet

Anti-PKC alpha (phospho S657 + Y658) antibody ab23513

★★★★☆ 4 Abreviews 7 References 4 Images

Overview

Product name	Anti-PKC alpha (phospho S657 + Y658) antibody
Description	Rabbit polyclonal to PKC alpha (phospho S657 + Y658)
Specificity	ab23513 detected PKC alpha and PKC beta I, but not other PKC isoforms in rat brain lysate.
Tested applications	Suitable for: ICC/IF, WB, ELISA, IP, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Rabbit, Human
Immunogen	Phospho-PKC alpha (Ser-657/Tyr-658) synthetic peptide (coupled to carrier protein) corresponding to amino acid residues around serine 657 and tyrosine 658 of human PKC alpha.
Positive control	Neonatal rat brain lysate, endothelial cells, HeLa cells, rabbit spleen fibroblasts, rat pituitary cells.
General notes	We do not have concentration information for this antibody. It is optimized to work at the dilutions stated on the datasheet.

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. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium Azide Constituents: 50% Glycerol, PBS, 1mg/ml BSA
Purity	Affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab23513** 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
ICC/IF		Use at an assay dependent concentration. PubMed: 22532868
WB	★★★★★	1/1000. Detects a band of approximately 82 kDa.
ELISA		1/2000.
IP		1/100. Use 5 - 10 µl.
IHC-P	★★★★☆	1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

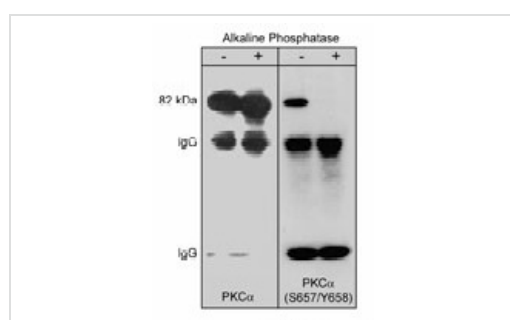
Target

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.

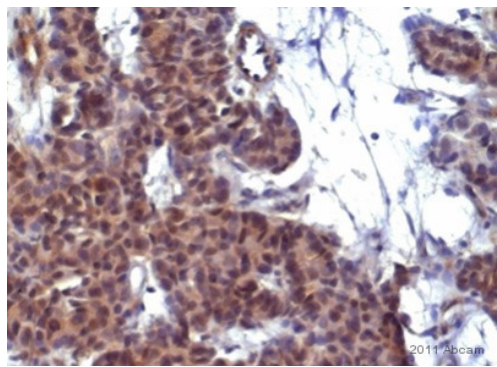
Cellular localization Cytoplasm. Cell membrane. Nucleus.

Images



Western blot - Anti-PKC alpha (phospho S657 + Y658) antibody (ab23513)

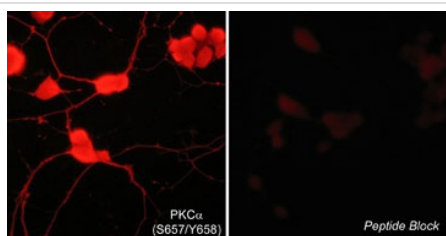
Western blot analysis of immunoprecipitates from neonatal rat brain lysate using anti-PKC α antibody. Control and alkaline phosphatase treated precipitates were probed with anti-PKC α (Central region) or anti-phospho-PKC α (Ser-657/Tyr-658).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC alpha (phospho S657 + Y658) antibody (ab23513)

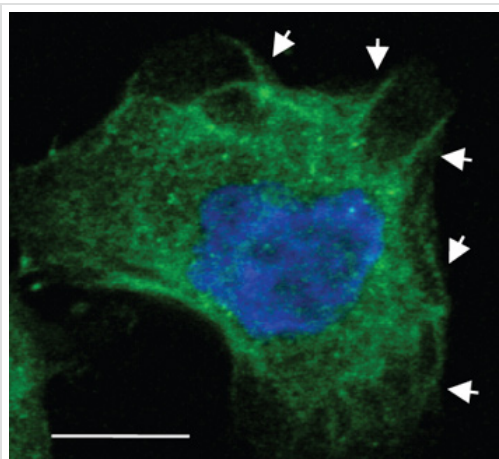
This image is courtesy of an anonymous Abreview

ab23513 staining PKC alpha (phospho S657 + Y658) in human pancreatic ductal adenocarcinoma tissue sections by Immunohistochemistry (IHC-P - formaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde, permeabilized with PBS + Triton 0.025% and blocked with 5% serum for 1 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH 6). Samples were incubated with primary antibody (1/100 in PBS) for 8 hours at 4°C. A Biotin-conjugated Goat anti-rabbit polyclonal (1/1000) was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-PKC alpha (phospho S657 + Y658) antibody (ab23513)

Immunocytochemical labeling of PKC phosphorylation in aldehyde-fixed and NP-40-permeabilized NGF-differentiated PC12 cells. The cells were labeled with rabbit polyclonal anti-PKC α (Ser-657/Tyr-658) (PP1091) antibody in the absence (Left) or presence (Right) of blocking peptide (PX1095). The antibody was detected using appropriate secondary antibody conjugated to DyLight® 594



Immunofluorescence analysis of S2-013 cells, staining PKC alpha (phospho S657 + Y658) with ab23513.

Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100, and blocked with blocking solution (3% BSA/PBS). Cells were incubated with primary antibody for 1 hour. An AlexaFluor®488-conjugated anti-rabbit IgG was used as the secondary antibody.

Immunocytochemistry/ Immunofluorescence - Anti-PKC alpha (phospho S657 + Y658) antibody (ab23513)

Image from Taniuchi K et al., PLoS One. 2012;7(4):e35674. Epub 2012 Apr 19. Fig 8.; doi:10.1371/journal.pone.0035674; April 19, 2012, PLoS ONE 7(4): e35674.

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