10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PKC nu Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7025A

Specification

PKC nu Antibody - Product Information

Application	**WB, IHC-P,E**
Primary Accession	O94806
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**352-384**

PKC nu Antibody - Additional Information

Gene ID 23683

Other Names
Serine/threonine-protein kinase D3, Protein kinase C nu type, Protein kinase EPK2, nPKC-nu, PRKD3, EPK2, PRKCN

Target/Specificity
This PKC-nu antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 352-384 amino acids from human PKC-nu.

Dilution
WB~~1:1000
IHC-P~~1:50~100

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PKC nu Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PKC nu Antibody - Protein Information

Name PRKD3

Synonyms EPK2, PRKCN

Function Converts transient diacylglycerol (DAG) signals into prolonged physiological effects,

downstream of PKC. Involved in resistance to oxidative stress (By similarity).

Cellular Location
Cytoplasm. Membrane. Note=Translocation to the cell membrane is required for kinase activation

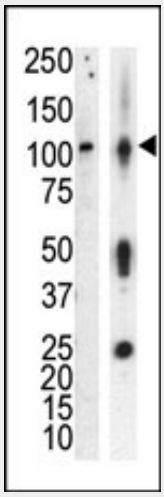
Tissue Location
Ubiquitous.

PKC nu Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

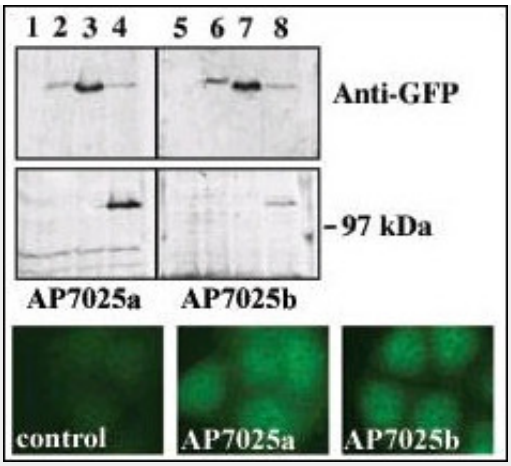
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PKC nu Antibody - Images

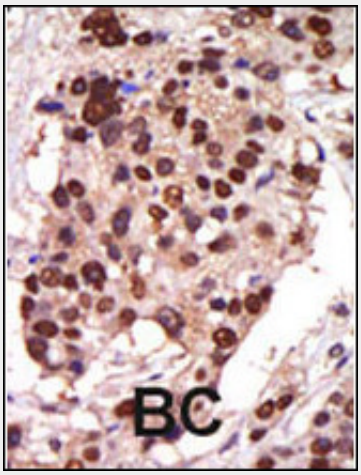


Western blot analysis of anti-PKCnu Pab (Cat. #AP7025a) in lysate of HL60 cells stimulated with PMA (lane A) and mouse brain tissue lysate (lane B). PKCnu (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Upper panel, western blot analysis of GFP fusion protein expression in Panc-1 cells by using an anti-GFP antibody. Lanes 1 and 5: non-transfected cells; lanes 2 and 6: GFP-PKD-transfected cells; lanes 3 and 7: GFP-PKD2-transfected cells; lanes 4 and 8: GFP-PKD3 transfected cells. Center panel, western blot analysis of GFP fusion protein expression in Panc-1 cells by using PKD3 N-term (AP7025a) and C-term (AP7025b) antibodies. Lower panel, indirect immunofluorescence analysis of GFP-PKD3 fusion protein expression in Panc-1 cells by using AP7025a and AP7025b antibodies. Data courtesy of Dr. Osvaldo Rey, University of California Los Angeles.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

PKC nu Antibody - Background

Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play distinct roles in cells. PKC nu is one of the PKC family members. This kinase can be activated rapidly by the agonists of G protein-coupled receptors. It resides in both cytoplasm and nucleus, and its nuclear accumulation is found to be dramatically enhanced in response to its activation. This kinase can also be activated after B-cell antigen receptor (BCR) engagement, which requires intact phopholipase C gamma and the involvement of other PKC family members.

PKC nu Antibody - References

Yeaman, C., et al., Nat. Cell Biol. 6(2):106-112 (2004).
Rey, O., et al., J. Biol. Chem. 278(26):23773-23785 (2003).
Matthews, S.A., et al., J. Biol. Chem. 278(11):9086-9091 (2003).
Bennasser, Y., et al., Virology 303(1):174-180 (2002).
Bennasser, Y., et al., FASEB J. 16(6):546-554 (2002).

PKC nu Antibody - Citations

- Protein kinase D3 (PKD3) contributes to prostate cancer cell growth and survival through a PKCepsilon/PKD3 pathway downstream of Akt and ERK 1/2.