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PKC nu Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7025B

Product Information

Application	WB, IHC-P, E
Primary Accession	O94806
Other Accession	Q8K1Y2
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB1290
Calculated MW	100471
Antigen Region	860-890

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 860-890 amino acids from the C-terminal region of human PKC nu.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

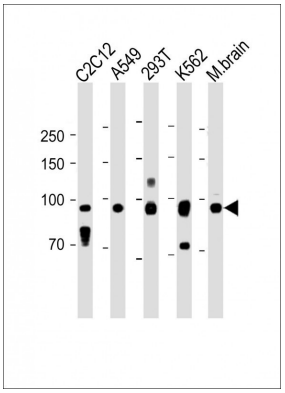
Background

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.

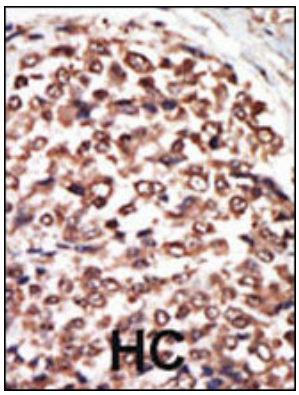
References

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).

Images



All lanes: Anti-PKC nu Antibody (C-term) at 1:1000 dilution Lane 1: C2C12 whole cell lysate Lane 2: A549 whole cell lysate Lane 3: 293T whole cell lysate Lane 4: K562 whole cell lysate Lane 5: Mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 95 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



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.

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