

Anti-Protein Kinase C beta (RABBIT) Antibody - 600-401-A76

Code: 600-401-A76

Size: 100 µg

Product Description: Anti-Protein Kinase C beta (RABBIT) Antibody - 600-401-A76

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	PRKCB
Species Reactivity	human, monkey
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	rabbit anti-Protein kinase C beta antibody, PKC β, Protein kinase C beta type, PRKCB, PKCB, PRKCB1, PKC-beta, PKC-B
Application Note	This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 76 kDa in size corresponding to PKC beta by western blotting in the appropriate cell lysate or extract. Lysates from U251 or BxPC3 cells are suggested for western blotting.
Background	This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Protein kinase C (PKC) beta is implicated as a potential important factor in cancer cell proliferation and angiogenesis. 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 family members 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 a distinct role in cells. The protein encoded by this gene is one of the PKC family members. This protein kinase has been reported to be involved in many different cellular functions, such as B cell activation, apoptosis induction, endothelial cell proliferation, and intestinal sugar absorption. Studies in mice also suggest that this kinase may also regulate neuronal functions and correlate fear-induced conflict behavior after stress. Alternatively spliced transcript variants encoding distinct isoforms have been reported.
Purity And Specificity	This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific for human PKC beta protein. A BLAST analysis was used to suggest cross-reactivity with PKC beta from human and monkey sources based on a 100% homology with the immunizing sequence. Expect partial cross reactivity to PKC beta from rabbit and bovine (93% homology) and rat and mouse (87% homology) sources. Cross-reactivity with PKC beta from other sources has not been determined.
Assay Dilutions	User Optimized
ELISA	1:75,000 - 1:80,000
Western Blot	1:1,000 - 1:2,000
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human Protein kinase C beta.

General Reference

Graff JR, McNulty AM, Hanna KR, Konicek BW, Lynch RL, Bailey SN, Banks C, Capen A, Goode R, Lewis JE, Sams L, Huss KL, Campbell RM, Iversen PW, Neubauer BL, Brown TJ, Musib L, Geeganage S, Thornton D. (2005) The protein kinase C beta-selective inhibitor, Enzastaurin (LY317615.HCl), suppresses signaling through the AKT pathway, induces apoptosis, and suppresses growth of human colon cancer and glioblastoma xenografts. *Cancer Res.* 65(16):7462-9. Koivunen J, Aaltonen V, Koskela S, Lehenkari P, Laato M, Peltonen J. (2004) Protein kinase C alpha/beta inhibitor Go6976 promotes formation of cell junctions and inhibits invasion of urinary bladder carcinoma cells. *Cancer Res.* 64(16):5693-701. Zhang J, Wang L, Petrin J, Bishop WR, Bond RW. (1993) Characterization of site-specific mutants altered at protein kinase C beta 1 isozyme autophosphorylation sites. *Proc Natl Acad Sci U S A.* 90(13):6130-4.

Related Products

000-000-401	AKT CONTROL PEPTIDE - 000-000-401
100-401-401	Anti-AKT (RABBIT) Antibody - 100-401-401
200-301-268	Anti-AKT pS473 (MOUSE) Monoclonal Antibody - 200-301-268
200-301-269	Anti-AKT pT308 (MOUSE) Monoclonal Antibody - 200-301-269

Related Links

NCBI - 47157322

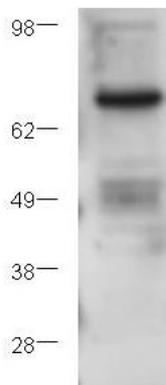
<http://www.ncbi.nlm.nih.gov/protein/47157322>

UniProtKB - <http://www.uniprot.org/uniprot/P05771>

GeneID - 5579

Images

- 1 Western blot using Rockland's affinity purified anti-PKC beta antibody shows detection of PKC beta in ~25 µg of U251 whole cell lysate (glioma derived). A 4-12% gel was used for separation. The arrowhead corresponds to 76 kDa PKC beta. The membrane was probed with the primary antibody at a 1:1,000 dilution in 5% BSA in TTBS at 4° C, overnight. Personal Communication, Howard Fine and Svetlana Kotliarova, CCR-NCI, Bethesda, MD.



Disclaimer

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