

Datasheet for 600-401-A76S**Protein Kinase C Beta Antibody****Overview**

Description:	Anti-Protein Kinase C beta (RABBIT) Antibody - 600-401-A76S
Item No.:	600-401-A76S
Size:	25 µL
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

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.

Synonyms:	rabbit anti-Protein kinase C beta antibody, PKC β , Protein kinase C beta type, PRKCB, PKCB, PRKCB1, PKC-beta, PKC-B
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name: PRKCB

Reactivity:	Human
Immunogen Type:	Conjugated Peptide
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.
Purity/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.
Relevant Links:	• UniProtKB - P05771 • NCBI - 47157322 • GeneID - 5579

Application Details

Tested Applications:	ELISA, WB
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 U251or BxPC3 cells are suggested for western blotting.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:75,000 - 1:80,000
WB:	1:1,000 - 1:2,000

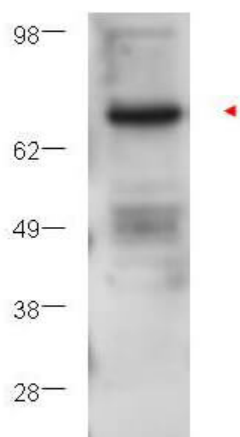
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is three (3) months from date of receipt.

Images



Western Blot

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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