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Datasheet for ABIN727010

anti-PKC beta antibody (AA 601-673)

2 Images

Overview

Quantity:	100 µL
Target:	PKC beta (PRKCB)
Binding Specificity:	AA 601-673
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PKC beta antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human PRKCB
Isotype:	IgG
Specificity:	This antibody will recognize isoform Beta-II & I of Protein kinase C beta
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Cow,Pig,Rabbit
Purification:	Purified by Protein A.

Target Details

Target: PKC beta (PRKCB)

Alternative Name: PKC beta ([PRKCB Products](#))

Background: Synonyms: PKCB, PRKCB1, PRKCB2, PKC-beta, Protein kinase C beta type, PKC-B, PRKCB
Background: Calcium-activated, phospholipid- and diacylglycerol (DAG)-dependent serine/threonine-protein kinase involved in various cellular processes such as regulation of the B-cell receptor (BCR) signalosome, oxidative stress-induced apoptosis, androgen receptor-dependent transcription regulation, insulin signaling and endothelial cells proliferation. Plays a key role in B-cell activation by regulating BCR-induced NF-kappa-B activation. Mediates the activation of the canonical NF-kappa-B pathway (NFKB1) by direct phosphorylation of CARD11/CARMA1 at 'Ser-559', 'Ser-644' and 'Ser-652'. Phosphorylation induces CARD11/CARMA1 association with lipid rafts and recruitment of the BCL10-MALT1 complex as well as MAP3K7/TAK1, which then activates IKK complex, resulting in nuclear translocation and activation of NFKB1. Plays a direct role in the negative feedback regulation of the BCR signaling, by down-modulating BTK function via direct phosphorylation of BTK at 'Ser-180', which results in the alteration of BTK plasma membrane localization and in turn inhibition of BTK activity. Involved in apoptosis following oxidative damage: in case of oxidative conditions, specifically phosphorylates 'Ser-36' of isoform p66Shc of SHC1, leading to mitochondrial accumulation of p66Shc, where p66Shc acts as a reactive oxygen species producer. Acts as a coactivator of androgen receptor (ANDR)-dependent transcription, by being recruited to ANDR target genes and specifically mediating phosphorylation of 'Thr-6' of histone H3 (H3T6ph), a specific tag for epigenetic transcriptional activation that prevents demethylation of histone H3 'Lys-4' (H3K4me) by LSD1/KDM1A. In insulin signaling, may function downstream of IRS1 in muscle cells and mediate insulin-dependent DNA synthesis through the RAF1-MAPK/ERK signaling cascade. May participate in the regulation of glucose transport in adipocytes by negatively modulating the insulin-stimulated translocation of the glucose transporter SLC2A4/GLUT4.

Gene ID: 5579

UniProt: [P05771](#)

Pathways: [WNT Signaling](#), [TCR Signaling](#), [Thyroid Hormone Synthesis](#), [Nuclear Hormone Receptor Binding](#), [Chromatin Binding](#), [Myometrial Relaxation and Contraction](#), [VEGF Signaling](#), [Unfolded Protein Response](#), [BCR Signaling](#)

Application Details

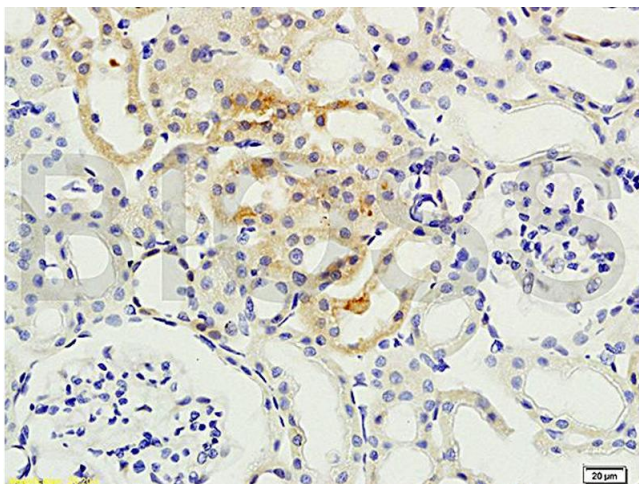
Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	FCM 1:20-100
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

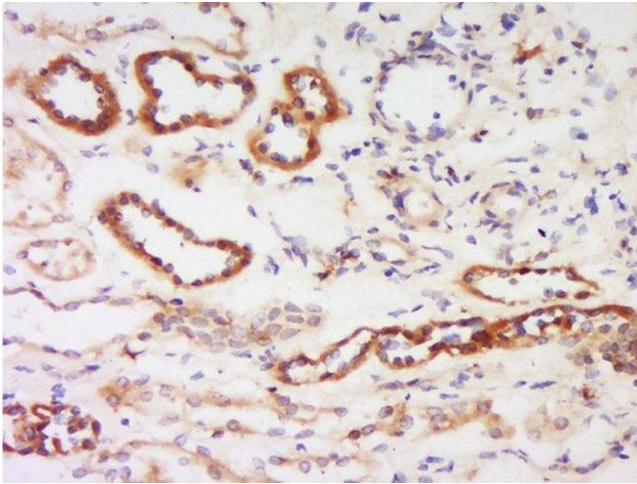
Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Images



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded: rat kidney tissue labeled with Anti-PKCB Polyclonal Antibody, Unconjugated (ABIN727010) at 1:200, followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Formalin-fixed and paraffin embedded human kidney labeled with Anti-Protein kinase C beta, Isoform II Polyclonal Antibody, Unconjugated at 1:200 followed by conjugation to the secondary antibody and DAB staining.