

Rabbit PKCB1 Polyclonal Antibody | anti-PKCB1 antibody

PKCB1 Antibody

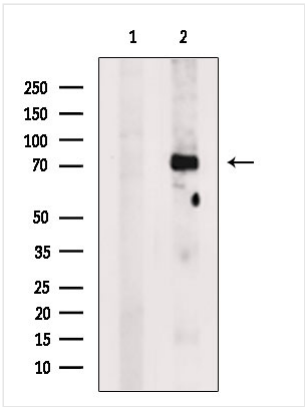
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328589	Rabbit	Human, Mouse, Rat Predicted: Bovine, Sheep, Rabbit	ELISA, Western Blot

PRODUCT SYNONYMS

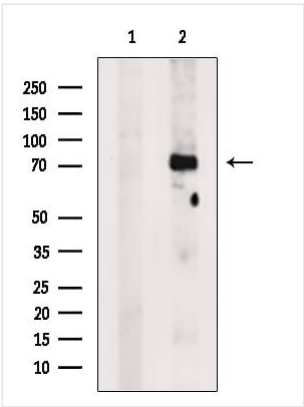
PKCB1; Polyclonal Antibody; PKCB1 Antibody; KPCB_HUMAN; PKC beta; PKC-B; PKC-beta; PKCB; Prkcb; PRKCB I; PRKCB II; PRKCB1; PRKCB2; Protein kinase C beta 1; Protein kinase C beta 2; Protein kinase C beta; Protein kinase C beta type; protein kinase C; beta 1 polypeptide; anti-PKCB1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted: Bovine, Sheep, Rabbit
Clonality	Polyclonal
Isotype	IgG
Specificity	PKCB1 Antibody detects endogenous levels of PKCB1.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid; Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	673
Applicable Applications for anti-PKCB1 antibody	ELISA (Peptide ELISA), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PKCB1.
Subcellular Location	Nucleus
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)
Western blot analysis of extracts from Rat brain, using PKCB1 Antibody . The lane on the left was treated with blocking peptide.



WB (Western Blot)
Western blot analysis of PKCB1 in lysates of HeLa , using PKCB1 Antibody .

ADDITIONAL INFORMATION

Related Product Information for anti-PKCB1 antibody	Description: 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. Under high glucose in pancreatic beta-cells, is probably involved in the inhibition of the insulin gene transcription, via regulation of MYC expression. In endothelial cells, activation of PRKCB induces increased phosphorylation of RB1, increased VEGFA-induced cell proliferation, and inhibits PI3K/AKT-dependent nitric oxide synthase (NOS3/eNOS) regulation by insulin, which causes endothelial dysfunction. Also involved in triglyceride homeostasis (By similarity). Phosphorylates ATF2 which promotes cooperation between ATF2 and JUN, activating transcription. Post Translational Modifications: Phosphorylation on Thr-500 within the activation loop renders it competent to autophosphorylate. Subsequent autophosphorylation of Thr-642 maintains catalytic competence, and autophosphorylation on Ser-661 appears to release the kinase into the cytosol. Autophosphorylation on other sites i.e. in the N-terminal and hinge regions have no effect on enzyme activity. Phosphorylation at Tyr-662 by SYK induces binding with GRB2 and contributes to the activation of MAPK/ERK signaling cascade (By similarity). Subunit Structure: Interacts with PDK1 (By similarity). Interacts in vitro with PRKCBP1. Interacts with PHLPP1 and PHLPP2; both proteins mediate its dephosphorylation. Interacts with KDM1A/LSD1, PKN1 and ANDR. Similarity: Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	20127450
NCBI GeneID	5579

NCBI Accession #	NP_002729.2
NCBI GenBank Nucleotide #	NP_002729.2
UniProt Accession #	P05771
Molecular Weight	Observed: 77 kDa Predicted: 77 kDa
NCBI Official Full Name	protein kinase C beta type isoform 2
NCBI Official Synonym Full Names	protein kinase C beta
NCBI Official Symbol	PRKCB
NCBI Official Synonym Symbols	PKCB; PRKCB1; PRKCB2; PKCI(2); PKCbeta; PKC-beta
NCBI Protein Information	protein kinase C beta type
UniProt Protein Name	Protein kinase C beta type
UniProt Gene Name	PRKCB
UniProt Synonym Gene Names	PKCB; PRKCB1; PKC-B; PKC-beta
UniProt Entry Name	KPCB_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pkcb1-antibody-peptide-elisa-western-blot-elisa/328589>