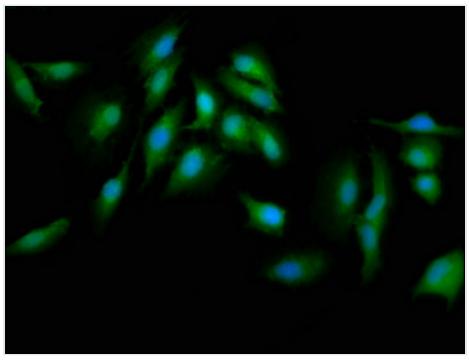
PRKCD Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	PRKCD, Polyclonal Antibody
Full Product Name	PRKCD Antibody
Product Gene Name	anti-PRKCD antibody
Product Synonym Names	Protein kinase C delta type; EC 2.7.11.13; Tyrosine-protein kinase PRKCD; EC 2.7.10.2; nPKC-delta; [Cleaved into: Protein kinase C delta type regulatory subunit; Protein kinase C delta type catalytic subunit (Sphingosine-dependent protein kinase-1; SDK1)]; PRKCD
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid
Purity/Purification	>95% Protein G Purified
Preparation and Storage	Upon receipt, store at-20 degree C or-80 degree C. Avoid repeated freeze.
Matching Pairs	Unconjugated Antibody: PRKCD (MBS7113522) HRP Conjugated Antibody: PRKCD (MBS7113523)
Matching Pairs	Unconjugated Antibody: PRKCD (MBS7113522) FITC Conjugated Antibody: PRKCD (MBS7113524)
Matching Pairs	Unconjugated Antibody: PRKCD (MBS7113522) Biotin Conjugated Antibody: PRKCD (MBS7113525)
Molecular Weight	80,953 Da
3D Structure	ModBase 3D Structure for Q05655
Immunogen Species	Human
Immunogen	Recombinant Human Protein kinase C delta type protein (505-633AA)
Conjugate	Non-Conjugated
Preservative	0.03% Proclin 300
Constituents	50% Glycerol, 0.01M PBS, pH 7.4
Product Categories/Family for anti-PRKCD antibody	Signal Transduction
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-PRKCD antibody	ELISA (EIA), Immunofluorescence (IF)
Application Notes for anti-PRKCD antibody	IF: 1:50-1:200
Related Product Information for anti-PRKCD antibody	MBS7113522 is an antibody targeting PRKCD. Also known as PRKCD Antibody. Reactive in Human. Host: Rabbit.

Other Notes	Small volumes of anti-PRKCD antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Immunofluorescence (IF) of anti-PRKCD antibody
Immunofluorescence staining of Hela cells with CSB-PA15899A0Rb at 1:133, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4 degree C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PRKCD. It may not necessarily be applicable to this product.

NCBI GI #	938403365
NCBI GeneID	5580
NCBI Accession #	NP_001303256.1
UniProt Primary Accession #	Q05655
UniProt Secondary Accession #	Q15144; Q86XJ6; B0KZ81; B2R834
UniProt Related Accession #	Q05655
GenBank Nucleotide #	NM_001316327.1
NCBI Official Full Name	protein kinase C delta type isoform c
NCBI Official Synonym Full Names	protein kinase C delta
NCBI Official Symbol	PRKCD
NCBI Official Synonym Symbols	MAY1; PKCD; ALPS3; CVID9; nPKC-delta
UniProt Protein Name	Protein kinase C delta type
UniProt Synonym Protein Names	Tyrosine-protein kinase PRKCD (EC:2.7.10.2); nPKC-delta
Protein Family	Protein kinase
UniProt Gene Name	PRKCD
UniProt Synonym Gene Names	SDK1
NCBI Protein Information	protein kinase C delta type
NCBI Summary for PRKCD	The protein encoded by this gene is a member of the protein kinase C family of serine- and threonine-specific protein kinases. The encoded protein is activated by diacylglycerol and is both a tumor suppressor and a positive regulator of cell cycle progression. Also, this protein can positively or negatively regulate apoptosis. Defects in this gene are a cause of autoimmune lymphoproliferative syndrome. [provided by RefSeq, Aug 2017]

UniProt Comments for PRKCD	Calcium-independent, phospholipid- and diacylglycerol (DAG)-dependent serine/threonine-protein kinase that plays contrasting roles in cell death and cell survival by functioning as a pro-apoptotic protein during DNA damage-induced apoptosis, but acting as an anti-apoptotic protein during cytokine receptor-initiated cell death, is involved in tumor suppression as well as survival of several cancers, is required for oxygen radical production by NADPH oxidase and acts as positive or negative regulator in platelet functional responses. Negatively regulates B cell proliferation and also has an important function in self-antigen induced B cell tolerance induction. Upon DNA damage, activates the promoter of the death-promoting transcription factor BCLAF1/Btf to trigger BCLAF1-mediated p53/TP53 gene transcription and apoptosis. In response to oxidative stress, interact with and activate CHUK/IKKA in the nucleus, causing the phosphorylation of p53/TP53. In the case of ER stress or DNA damage-induced apoptosis, can form a complex with the tyrosine-protein kinase ABL1 which trigger apoptosis independently of p53/TP53. In cytosol can trigger apoptosis by activating MAPK11 or MAPK14, inhibiting AKT1 and decreasing the level of X-linked inhibitor of apoptosis protein (XIAP), whereas in nucleus induces apoptosis via the activation of MAPK8 or MAPK9. Upon ionizing radiation treatment, is required for the activation of the apoptosis regulators BAX and BAK, which trigger the mitochondrial cell death pathway. Can phosphorylate MCL1 and target it for degradation which is sufficient to trigger for BAX activation and apoptosis. Is required for the control of cell cycle progression both at G1/S and G2/M phases. Mediates phorbol 12-myristate 13-acetate (PMA)-induced inhibition of cell cycle progression at G1/S phase by up-regulating the CDK inhibitor CDKN1A/p21 and inhibiting the cyclin CCNA2 promoter activity. In response to UV irradiation can phosphorylate CDK1, which is important for the G2/M DNA damage checkpoint activation. Can protect glioma cells from the apoptosis induced by TNFSF10/TRAIL, probably by inducing increased phosphorylation and subsequent activation of AKT1. Is highly expressed in a number of cancer cells and promotes cell survival and resistance against chemotherapeutic drugs by inducing cyclin D1 (CCND1) and hyperphosphorylation of RB1, and via several pro-survival pathways, including NF-kappa-B, AKT1 and MAPK1/3 (ERK1/2). Can also act as tumor suppressor upon mitogenic stimulation with PMA or TPA. In N-formyl-methionyl-leucyl-phenylalanine (fMLP)-treated cells, is required for NCF1 (p47-phox) phosphorylation and activation of NADPH oxidase activity, and regulates TNF-elicited superoxide anion production in neutrophils, by direct phosphorylation and activation of NCF1 or indirectly through MAPK1/3 (ERK1/2) signaling pathways. May also play a role in the regulation of NADPH oxidase activity in eosinophil after stimulation with IL5, leukotriene B4 or PMA. In collagen-induced platelet aggregation, acts a negative regulator of filopodia formation and actin polymerization by interacting with and negatively regulating VASP phosphorylation. Downstream of PAR1, PAR4 and CD36/GP4 receptors, regulates differentially platelet dense granule secretion; acts as a positive regulator in PAR-mediated granule secretion, whereas it negatively regulates CD36/GP4-mediated granule release. Phosphorylates MUC1 in the C-terminal and regulates the interaction between MUC1 and beta-catenin. The catalytic subunit phosphorylates 14-3-3 proteins (YWHAB, YWHAZ and YWHAH) in a sphingosine-dependent fashion (). Phosphorylates ELAVL1 in response to angiotensin-2 treatment (PubMed:18285462).
Research Articles on PRKCD	**1.** Dynamics characterization imparts that binding of long-chain octanol and DOG to pocket 2 or binding of sevoflurane to pocket 3 can induce a conformational displacement in arm 1 or 2, thus further opening the included angle and enlarging pocket 1, which can improve the pocket 1-PE affinity via an allosteric mechanism, consequently stimulating the PE-induced PKCdelta activation.
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