PKCθ (P632) Antibody	С	Cell Signaling	
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For Research Use Only. Not for Use in Diagnostic Procedures.

InformationWestern Blotting Immunoprecipitation1:1000 1:50StorageSupplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at - 20°C. Do not aliquot the antibody.Specificity/SensitivityPKC0 (P632) Antibody recognizes endogenous levels of total PKC0 protein.Species predicted to react based on 100% sequence homologyMonkey, Bovine, DogSource / PurificationPolyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro632 of human PKC0 protein. Antibodies are purified by protein A and peptide affinity chromatography.BackgroundActivation of protein kinase C (PKC) is one of the earliest events in a cascade that controls a variety of cellular responses, including secretion, gene expression, proliferation, and muscle contraction (1,2). PKC isoforms belong to three groups based on calcium dependency and activators. Classical PKCs are calcium-dependent via their C2 domains and are activated by phosphatidylserine (PS), diacylglycerol (DAG), and phorbol esters (TPA, PMA) through their cysteine-rich C1 domains. Both novel and atypical PKCs are calcium-idependent, but only novel PKCs are activated by PS, DAG, and phorbol esters (3-5). Members of these three PKC groups contain a pseudo-substrate or autoinhibitory domain that binds t substrate-binding sites in the catalytic domain to prevent activated by PS, DAG, and phorbol esters Phosphorylation, and at the carboxy-terminal hydrophobic iste Ser660 (2). Atypical PKC isoforms lack hydrophobic region phosphorylation, which correlates with the presence of glutamic acid rather than the serine or threonine residues found in more typical PKC isoforms. The enzyme PDK1 or a close	Applications: W, IP	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 78	Source/Isotype: Rabbit	UniProt ID: #Q04759	Entrez-Gene Id: 5588
20"C. Do not aliquot the antibody. Species predicted to react based on 100% sequence homology Monkey. Bovine, Dog Source / Purification Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro532 of human PKC0 protein. Antibodies are purified by protein A and peptide affinity chromatography. Background Activation of protein kinase C (PKC) is one of the earliest events in a cascade that controls a variety of cellular responses, including secretion, gene expression, profileration, and muscle contraction (1,2). PKC isoforms belong to three groups based on calcium dependency and activators. Classical PKCs are calcium-dependent via their C2 domains and are activated by PS, DAG, and phorbol esters (17PA, PMA) through their cysteine-rich C1 domains. Both novel and atypics15, Members of these three PKC groups contain a pseudo-substrate or autoinhibury domain the binds to substrate-binding site in the catalytic domain to prevent activation in the absence of cofactors or activators. Control of PKC activity is regulated through three distinct phosphat/plation events. Phosphorylation, and at the carboxy-terminal hydrophobic site Ser660 (2). Atypical PKC isoforms lack hydrophobic region phosphorylation. Artecor calcius with the presence of alumine acid rather than the serine or threonine residues found in more typical PKC isoforms. The enzyme PKI to a closs relative is responsible for PKC activity is regulated through there distinguished by the presence of a PH domain and by its unique substrate recognition and Golgi localization (b). PKC-related kinases (PKK), lack the C1 domain and do not respond to DAG or phorbol esters. Phosphatidylinositol lipids activate PRKs, and small Rho-family GTPases bind to the homology region 1 (HRI) to regulate PRK kinases activity (7).	Product Usage Information		Western Blotting			1:1000	
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biased on 100% sequence homology Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro82 of human PKC0 protein. Antibodies are purified by protein A and peptid affinity chromatography. Background Activation of protein kinase C (PKC) is one of the earliest events in a cascade that controls a variety of cellular responses, including secretion, gene expression, proliferation, and muscle contraction (1,2). PKC isoforms belong to three groups based on calcium dependency and activators. Classical PKCs are calcium-dependent via their C2 domains and are activated by phosphatidylserine (PS), diacylglycerol (DAG), and phorbol esters (TPA, PMA) through their cystein-rich C1 domains. Both novel and arypical PKCs are calcium-dependent via their C2 domains and are activated by PS, DAG, and phorbol esters (3-5). Members of these three PKC groups contain a pseudo-subrate or autoinhibitory domain that binds i substrate-binding sites in the catalytic domain to prevent activation in the absence of cofactors or activators. Control of PKC activity is regulated through three distinct phosphorylation events. Phosphorylation, and at the carboxy-terminal hydrophobic site Ser660 (2). Atypical PKC isoforms lack hydrophobic region phosphorylation, which correlates with the presence of a PH domain and by its unique substrate recognition and Golg iocalization (6). PKC-related kinases activity (7). Background References 1. Nishizuka, Y. (1984) Nature 308, 693-8. 2. Keranen, L.M. et al. (1995) <i>Curr Biols</i> , 1394-403. 3. Mellor H. and Parker, PJ. (1998) <i>Biochem</i> /132 (Pt2), 281-92. 4. Ron, D. and Maznietz, MC. (1999) <i>FASEB</i> /13, 1658-76. 5. Moscat, J. and Diaz-Meco, MT. (2000) <i>EMBO Rep</i> 1, 399-403. 6. Baron, C.L. and Malhotra, V. (2002) <i>Science</i> 295, 325-8. 7. Fynn, P. et al. (2000) <i>J Biol Chem</i> 275, 11064-70.	Specificity/Sen	sitivity	PKCθ (P632) Antibody recognizes endogenous levels of total PKCθ protein.				
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	Western Blot B	uffer				primary antibody i	n 5% w/v BSA, 1X
Cross-Reactivity Key H: Human M: Mouse R: Rat	Applications K	ey	W: Western Blotting IF	P: Immunoprecipit	ation		
	Cross-Reactivit	у Кеу	H: Human M: Mouse F	R: Rat			

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