

Rabbit PRKCE Polyclonal Antibody | anti-PRKCE antibody

PRKCE Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA167107	Rabbit	Human, Mouse, Rat	Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PRKCE; Polyclonal Antibody; PRKCE Antibody; MGC125656; MGC125657; PKCE; nPKC-epsilon; anti-PRKCE antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Antigen affinity purification
Concentration	1mg/mL (varies by lot)
Sequence Length	737
Applicable Applications for anti-PRKCE antibody	ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	Recombinant protein of human PRKCE
Buffer	PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-214
Preparation and Storage	Store at -20 degree C (regular) and -80 degree C (long term). Avoid freeze / thaw cycles.

IMAGES



IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded human colon using PRKCE antibody at dilution of 1:200 (x400 lens)



IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded rat spleen using PRKCE antibody at dilution of 1:200 (x400 lens)



WB (Western Blot)

Western blot analysis of extracts of various cell lines, using PRKCE antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-PRKCE antibody	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 cysteine-rich C1 domains. Both novel and atypical PKCs are calcium-independent, 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 to 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 occurs in vivo at Thr500 in the activation loop, at Thr641 through autophosphorylation, and at the carboxy-terminal hydrophobic site 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 relative is responsible for PKC activation. A recent addition to the PKC superfamily is PKCmu (PKD), which is regulated by DAG and TPA through its C1 domain. PKD is distinguished by the presence of a PH domain and by its unique substrate recognition and Golgi localization (6). PKC-related kinases (PRK) 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 (HR1) to regulate PRK kinase activity (7).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4885563
NCBI GeneID	5581
NCBI Accession #	NP_005391.1
NCBI GenBank Nucleotide #	NM_005400.2
Molecular Weight	83,674 Da
NCBI Official Full Name	protein kinase C epsilon type
NCBI Official Synonym Full Names	protein kinase C, epsilon
NCBI Official Symbol	PRKCE
NCBI Official Synonym Symbols	PKCE; nPKC-epsilon
NCBI Protein Information	protein kinase C epsilon type
UniProt Protein Name	Protein kinase C epsilon type
UniProt Gene Name	PRKCE
UniProt Synonym Gene Names	PKCE
UniProt Entry Name	KPCE_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.