

Rabbit PKC epsilon Polyclonal Antibody | anti-PRKCE antibody

Phospho-PKC epsilon (Ser729) Antibody

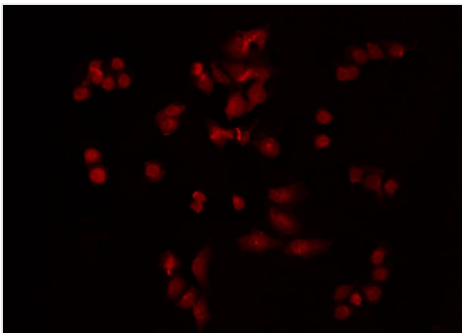
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA327232	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PKC epsilon; Polyclonal Antibody; Phospho-PKC epsilon (Ser729) Antibody; KPCE_HUMAN; MGC125656; MGC125657; nPKC epsilon; nPKC-epsilon; PKCE; Pkcea; PRKCE; Protein kinase C epsilon; Protein kinase C epsilon type; anti-PRKCE antibody

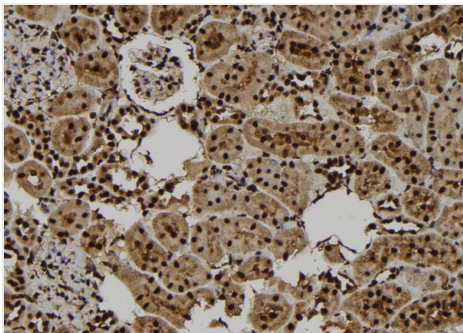
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PKC epsilon (phospho S729) antibody detects endogenous levels of PKC epsilon only when phosphorylated at S729
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho-and non-phospho-peptide affinity columns.
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	737
Applicable Applications for anti-PRKCE antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PKC epsilon (phospho S729)
Subcellular Location	Nucleus; Cytoskeleton; Plasma Membrane
Conjugation	Unconjugated
Epitope	Phospho Ser729
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



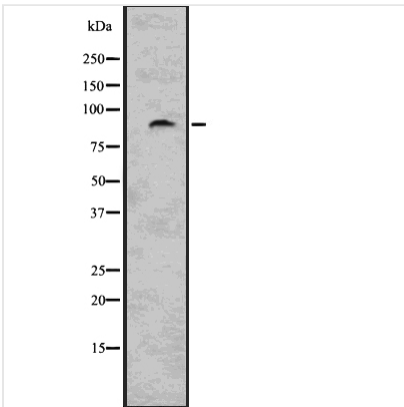
IF (Immunofluorescence)

AAA327232 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



IHC (Immunohistochemistry)

AAA327232 at 1/100 staining Rat kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)

Western blot analysis of PKC epsilon (phospho S729) using HUVEC whole cell lysates

ADDITIONAL INFORMATION

Related Product Information for anti-PRKCE antibody	Function: Calcium-independent, phospholipid-and diacylglycerol (DAG)-dependent serine/threonine-protein kinase that plays essential roles in the regulation of multiple cellular processes linked to cytoskeletal proteins, such as cell adhesion, motility, migration and cell cycle, functions in neuron growth and ion channel regulation, and is involved in immune response, cancer cell invasion and regulation of apoptosis. Mediates cell adhesion to the extracellular matrix via integrin-dependent signaling, by mediating angiotensin-2-induced activation of integrin beta-1 (ITGB1) in cardiac fibroblasts. Phosphorylates MARCKS, which phosphorylates and activates PTK2/FAK, leading to the spread of cardiomyocytes. Involved in the control of the directional transport of ITGB1 in mesenchymal cells by phosphorylating vimentin (VIM), an intermediate filament (IF) protein. In epithelial cells, associates with and phosphorylates keratin-8 (KRT8), which induces targeting of desmoplakin at desmosomes and regulates cell-cell contact. Phosphorylates IQGAP1, which binds to CDC42, mediating epithelial cell-cell detachment prior to migration. In HeLa cells, contributes to hepatocyte growth factor (HGF)-induced cell migration, and in human corneal epithelial cells, plays a critical role in wound healing after activation by HGF. During cytokinesis, forms a complex with YWHAB, which is crucial for daughter cell separation, and facilitates abscission by a mechanism which may implicate the regulation of RHOA. In cardiac myocytes, regulates myofilament function and excitation coupling at the Z-lines, where it is indirectly associated with F-actin via interaction with COPB1. During endothelin-induced cardiomyocyte hypertrophy, mediates activation of PTK2/FAK, which is critical for cardiomyocyte survival and regulation of sarcomere length. Plays a role in the pathogenesis of dilated cardiomyopathy via persistent phosphorylation of troponin I (TNNI3). Involved in nerve growth factor (NFG)-induced neurite outgrowth and neuron morphological change independently of its kinase activity, by inhibition of RHOA pathway, activation of CDC42 and cytoskeletal rearrangement. May be involved in presynaptic facilitation by mediating phorbol ester-induced synaptic potentiation. Phosphorylates gamma-aminobutyric acid receptor subunit gamma-2 (GABRG2), which reduces the response of GABA receptors to ethanol and benzodiazepines and may mediate acute tolerance to the intoxicating effects of ethanol. Upon PMA treatment, phosphorylates the capsaicin-and heat-activated cation channel TRPV1, which is required for bradykinin-induced sensitization of the heat response in nociceptive neurons. Is able to form a complex with PDLIM5 and N-type calcium channel, and may enhance channel activities and potentiates fast synaptic transmission by phosphorylating the pore-forming alpha subunit CACNA1B (CaV2.2). In prostate cancer cells, interacts with and phosphorylates STAT3, which increases DNA-binding and transcriptional activity of STAT3 and seems to be essential for prostate cancer cell invasion. Downstream of TLR4, plays an important role in the lipopolysaccharide (LPS)-induced immune response by phosphorylating and activating TICAM2/TRAM, which in turn activates the transcription factor IRF3 and subsequent cytokines production. In differentiating erythroid progenitors, is regulated by EPO and controls the protection against the TNFSF10/TRAIL-mediated apoptosis, via BCL2. May be involved in the regulation of the insulin-induced phosphorylation and activation of AKT1. Subunit Structure: Forms a ternary complex with TRIM63 and GN2BL1. Can form a complex with PDLIM5 and N-type calcium channel. Interacts with COPB1 and YWHAB (By similarity). Interacts with DGKQ and STAT3. Interacts with HSP90AB1; promotes functional activation in a heat shock-dependent manner (PubMed:20353823). Post-translational Modifications: Phosphorylation on Thr-566 by PDPK1 triggers autophosphorylation on Ser-729. Phosphorylation in the hinge domain at Ser-350 by MAPK11 or MAPK14, Ser-346 by GSK3B and Ser-368 by autophosphorylation is required for interaction with YWHAB. Similarity: The C1 domain, containing the phorbol ester/DAG-type region 1 (C1A) and 2 (C1B), is the diacylglycerol sensor and the C2 domain is a non-calcium binding domain. Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily.
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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
UniProt Accession #	Q02156; Q32MQ3; Q53SL4; Q53SM5; Q9UE81; B0LPH7
Molecular Weight	Observed: 84 kDa Predicted: 84 kDa
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

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/pkc-epsilon-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/327232>