

Rabbit PKC theta Polyclonal Antibody | anti-PKCtheta antibody

Phospho-PKC theta (Ser695) Antibody

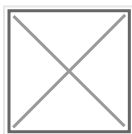
CATALOG # AAA31290	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, ELISA
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PRODUCT SYNONYMS

PKC theta; Polyclonal Antibody; Phospho-PKC theta (Ser695) Antibody; KPCT_HUMAN; MGC126514; MGC141919; nPKC theta; nPKC-theta; nPKCtheta; OTTHUMP00000043364; OTTHUMP00000043365; PKC 0; PKC0; Prkcq; PRKCT; Protein kinase C theta; Protein kinase C theta type; Protein Kinase Ctheta; anti-PKCtheta antibody

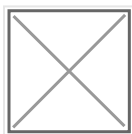
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-PKC theta (Ser695) Antibody detects endogenous levels of PKC theta only when phosphorylated at Ser695. Tissue Specificity: Expressed in skeletal muscle, T-cells, megakaryoblastic cells and platelets.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-PKCtheta antibody	IHC (Immunohistochemistry), ELISA (Peptide ELISA)
Application Notes	IHC: 1:50-1:200 Peptide ELISA: 1:20,000-1:40,000
Immunogen	A synthesized peptide derived from human PKC theta around the phosphorylation site of Ser695.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Autophosphorylation at Thr-219 is required for targeting to the TCR and cellular function of PRKCQ upon antigen receptor ligation. Following TCR stimulation, phosphorylated at Tyr-90 and Ser-685.
Subunit Structure	Part of a lipid raft complex composed at least of BCL10, CARD11, MALT1 and IKBKB. Interacts with GLRX3 (via N-terminus). Interacts with ECT2. Interacts with CCDC88A/GIV; the interaction leads to phosphorylation of CCDC88A and inhibition of its guanine nucleotide exchange factor activity.
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.
Subcellular Location	Cytoplasm. Cell membrane>Peripheral membrane protein. Note: In resting T-cells, mostly localized in cytoplasm. In response to TCR stimulation, associates with lipid rafts and then localizes in the immunological synapse.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)

At 1/100 staining Mouse testis 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 primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/100 staining Mouse muscle 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 primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



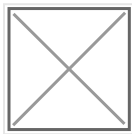
IHC (Immunohistochemistry)

At 1/100 staining Rat heart 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 primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



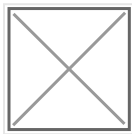
IHC (Immunohistochemistry)

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 primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

Staining Rat testis 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 primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/100 staining Rat skin 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 primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-PKTheta antibody

Calcium-independent, phospholipid- and diacylglycerol (DAG)-dependent serine/threonine-protein kinase that mediates non-redundant functions in T-cell receptor (TCR) signaling, including T-cells activation, proliferation, differentiation and survival, by mediating activation of multiple transcription factors such as NF-kappa-B, JUN, NFATC1 and NFATC2. In TCR-CD3/CD28-co-stimulated T-cells, is required for the activation of NF-kappa-B and JUN, which in turn are essential for IL2 production, and participates in the calcium-dependent NFATC1 and NFATC2 transactivation. Mediates the activation of the canonical NF-kappa-B pathway (NFKB1) by direct phosphorylation of CARD11 on several serine residues, inducing CARD11 association with lipid rafts and recruitment of the BCL10-MALT1 complex, which then activates IKK complex, resulting in nuclear translocation and activation of NFKB1. May also play an indirect role in activation of the non-canonical NF-kappa-B (NFKB2) pathway. In the signaling pathway leading to JUN activation, acts by phosphorylating the mediator STK39/SPAK and may not act through MAP kinases signaling. Plays a critical role in TCR/CD28-induced NFATC1 and NFATC2 transactivation by participating in the regulation of reduced inositol 1,4,5-trisphosphate generation and intracellular calcium mobilization. After costimulation of T-cells through CD28 can phosphorylate CBLB and is required for the ubiquitination and subsequent degradation of CBLB, which is a prerequisite for the activation of TCR. During T-cells differentiation, plays an important role in the development of T-helper 2 (Th2) cells following immune and inflammatory responses, and, in the development of inflammatory autoimmune diseases, is necessary for the activation of IL17-producing Th17 cells. May play a minor role in Th1 response. Upon TCR stimulation, mediates T-cell protective survival signal by phosphorylating BAD, thus protecting T-cells from BAD-induced apoptosis, and by up-regulating BCL-X (L)/BCL2L1 levels through NF-kappa-B and JUN pathways. In platelets, regulates signal transduction downstream of the ITGA2B, CD36/GP4, F2R/PAR1 and F2RL3/PAR4 receptors, playing a positive role in 'outside-in' signaling and granule secretion signal transduction. May relay signals from the activated ITGA2B receptor by regulating the uncoupling of WASP and WIPF1, thereby permitting the regulation of actin filament nucleation and branching activity of the Arp2/3 complex. May mediate inhibitory effects of free fatty acids on insulin signaling by phosphorylating IRS1, which in turn blocks IRS1 tyrosine phosphorylation and downstream activation of the PI3K/AKT pathway. Phosphorylates MSN (moesin) in the presence of phosphatidylglycerol or phosphatidylinositol. Phosphorylates PDPK1 at 'Ser-504' and 'Ser-532' and negatively regulates its ability to phosphorylate PKB/AKT1. Phosphorylates CCDC88A/GIV and inhibits its guanine nucleotide exchange factor activity.

NCBI AND UNIPROT INFORMATION

NCBI GI #	334848126
NCBI GeneID	5588
NCBI Accession #	NP_001229342.1
NCBI GenBank Nucleotide #	NM_001242413.1
UniProt Accession #	Q04759; Q14DH6; Q3MJF1; Q64FY5; Q9H508; Q9H549
Molecular Weight	81,865 Da
NCBI Official Full Name	protein kinase C theta type isoform 2
NCBI Official Synonym Full Names	protein kinase C, theta
NCBI Official Symbol	PRKCQ
NCBI Official Synonym Symbols	PRKCT; nPKC-theta
NCBI Protein Information	protein kinase C theta type
UniProt Protein Name	Protein kinase C theta type
UniProt Gene Name	PRKCQ
UniProt Synonym Gene Names	PRKCT
UniProt Entry Name	KPCT_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/pkc-theta-antibody-immunohistochemistry-peptide-elisa-elisa/31290>