

Rabbit PKC gamma Polyclonal Antibody | anti-PKCgamma antibody

Phospho-PKC gamma (Thr655) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329888	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (83%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (89%), Dog (100%)	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PKC gamma; Polyclonal Antibody; Phospho-PKC gamma (Thr655) Antibody; KPCG_HUMAN; MGC57564; OTTHUMP00000067291; PKC-gamma; PKCC; PKCG; PRKCG; Protein kinase C gamma; Protein kinase C gamma polypeptide; Protein kinase C gamma type; Protein kinase C; gamma; SCA 14; SCA14; anti-PKCgamma antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (83%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (89%), Dog (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-PKC gamma (Thr655) Antibody detects endogenous levels of PKC gamma only when phosphorylated at Thr655. Tissue Specificity: Expressed in Purkinje cells of the cerebellar cortex.
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-PKCgamma antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PKC gamma around the phosphorylation site of Thr655.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Autophosphorylation on Thr-674 appears to regulate motor functions of junctophilins, JPH3 and JPH4. Ubiquitinated.
Subunit Structure	Interacts with GRIA4 (By similarity). Interacts with CDCP1. Interacts with TP53INP1 and p53/TP53. Interacts with ARNTL/BMAL1 (By similarity).
Similarity	Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily.
Subcellular Location	Cytoplasm. Cytoplasm>Perinuclear region. Cell membrane>Peripheral membrane protein. Cell junction>Synapse>Synaptosome. Cell projection>Dendrite. Note: Translocates to synaptic membranes on stimulation.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



Application Data

At 25 degree C. Samples were then incubated with primary Ab(At 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI(blue).



IHC (Immunohistochemistry)

At 1/100 staining Mouse colorectal 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.



WB (Western Blot)

Western blot analysis of PRKCG (Phospho-Thr655) using Na3VO4 treated HepG2 whole cell lysates. -/+ means absence or presence of N peptide(1/4 non-phospho peptide) and P peptide(phospho peptide).



WB (Western Blot)

Western blot analysis of extracts from mouse brain, using PRKCG (Phospho-Thr655) Antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-PRKCGgamma antibody

Calcium-activated, phospholipid- and diacylglycerol (DAG)-dependent serine/threonine-protein kinase that plays diverse roles in neuronal cells and eye tissues, such as regulation of the neuronal receptors GRIA4/GLUR4 and GRIN1/NMDAR1, modulation of receptors and neuronal functions related to sensitivity to opiates, pain and alcohol, mediation of synaptic function and cell survival after ischemia, and inhibition of gap junction activity after oxidative stress. Binds and phosphorylates GRIA4/GLUR4 glutamate receptor and regulates its function by increasing plasma membrane-associated GRIA4 expression. In primary cerebellar neurons treated with the agonist 3,5-dihydroxyphenylglycine, functions downstream of the metabotropic glutamate receptor GRM5/MGLUR5 and phosphorylates GRIN1/NMDAR1 receptor which plays a key role in synaptic plasticity, synaptogenesis, excitotoxicity, memory acquisition and learning. May be involved in the regulation of hippocampal long-term potentiation (LTP), but may be not necessary for the process of synaptic plasticity. May be involved in desensitization of mu-type opioid receptor-mediated G-protein activation in the spinal cord, and may be critical for the development and/or maintenance of morphine-induced reinforcing effects in the limbic forebrain. May modulate the functionality of mu-type-opioid receptors by participating in a signaling pathway which leads to the phosphorylation and degradation of opioid receptors. May also contributes to chronic morphine-induced changes in nociceptive processing. Plays a role in neuropathic pain mechanisms and contributes to the maintenance of the allodynia pain produced by peripheral inflammation. Plays an important role in initial sensitivity and tolerance to ethanol, by mediating the behavioral effects of ethanol as well as the effects of this drug on the GABA (A) receptors. During and after cerebral ischemia modulate neurotransmission and cell survival in synaptic membranes, and is involved in insulin-induced inhibition of necrosis, an important mechanism for minimizing ischemic injury. Required for the elimination of multiple climbing fibers during innervation of Purkinje cells in developing cerebellum. Is activated in lens epithelial cells upon hydrogen peroxide treatment, and phosphorylates connexin-43 (GJA1/CX43), resulting in disassembly of GJA1 gap junction plaques and inhibition of gap junction activity which could provide a protective effect against oxidative stress (By similarity). Phosphorylates p53/TP53 and promotes p53/TP53-dependent apoptosis in response to DNA damage. Involved in the phase resetting of the cerebral cortex circadian clock during temporally restricted feeding. Stabilizes the core clock component ARNTL/BMAL1 by interfering with its ubiquitination, thus suppressing its degradation, resulting in phase resetting of the cerebral cortex clock (By similarity).

NCBI AND UNIPROT INFORMATION

NCBI GI #	13384594
NCBI GeneID	5582
NCBI Accession #	NP_002730.1
NCBI GenBank Nucleotide #	NM_002739.3
UniProt Accession #	P05129

Molecular Weight	78,448 Da
NCBI Official Full Name	protein kinase C gamma type
NCBI Official Synonym Full Names	protein kinase C, gamma
NCBI Official Symbol	PRKCG
NCBI Official Synonym Symbols	PKCC; PKCG; SCA14; PKC-gamma
NCBI Protein Information	protein kinase C gamma type
UniProt Protein Name	Protein kinase C gamma type
UniProt Gene Name	PRKCG
UniProt Synonym Gene Names	PKCG; PKC-gamma
UniProt Entry Name	KPCG_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-gamma-antibody-peptide-elisa-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/329888>