

Datasheet for ABIN7165711
anti-PKC gamma antibody (AA 1-314)



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1 Image

Overview

Quantity:	100 µg
Target:	PKC gamma (PRKCG)
Binding Specificity:	AA 1-314
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PKC gamma antibody is un-conjugated
Application:	ELISA, Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Protein kinase C gamma type protein (1-314AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	PKC gamma (PRKCG)
Alternative Name:	PRKCG (PRKCG Products)
Background:	Background: 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).

Aliases: KPCG_HUMAN antibody, MGC57564 antibody, OTTHUMP00000067291 antibody, PKC-gamma antibody, PKCC antibody, PKCG antibody, PRKCG antibody, Protein kinase C gamma antibody, Protein kinase C gamma polypeptide antibody, Protein kinase C gamma type antibody, Protein kinase C, gamma antibody, SCA 14 antibody, SCA14 antibody

UniProt:

[P05129](#)

Target Details

Pathways: [WNT Signaling](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Thyroid Hormone Synthesis](#), [Myometrial Relaxation and Contraction](#), [G-protein mediated Events](#), [Positive Regulation of Response to DNA Damage Stimulus](#), [Interaction of EGFR with phospholipase C-gamma](#), [Thromboxane A2 Receptor Signaling](#), [VEGF Signaling](#)

Application Details

Application Notes: Recommended dilution: IF:1:50-1:200,

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Preservative: 0.03 % Proclin 300
Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4

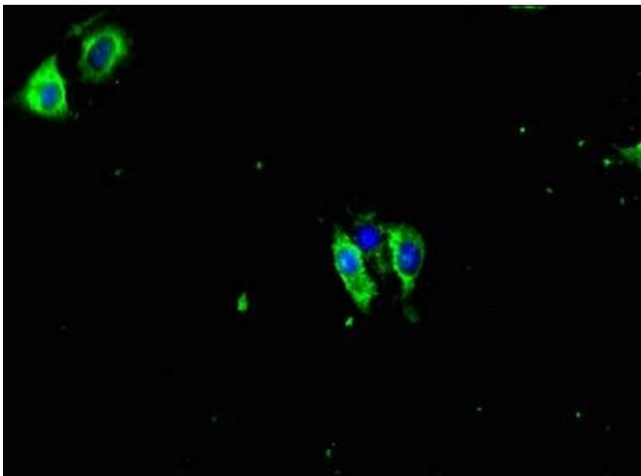
Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C,-80 °C

Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunofluorescence

Image 1. Immunofluorescent analysis of HeLa cells using ABIN7165711 at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)