

ARG55525 anti-PKC iota antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PKC iota
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PKC iota
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 176-207 (N-terminus) of Human PKC iota.
Conjugation	Un-conjugated
Alternate Names	PRKC-lambda/iota; EC 2.7.11.13; Protein kinase C iota type; nPKC-iota; PKCI; Atypical protein kinase C-lambda/iota; DXS1179E; aPKC-lambda/iota

Application Instructions

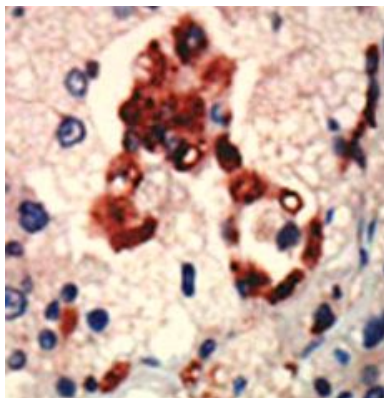
Application table	Application	Dilution
	IHC-P	1:50 - 1:100
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

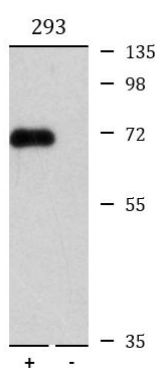
Bioinformation

Database links	GeneID: 5584 Human Swiss-port # P41743 Human
Gene Symbol	PRKCI
Gene Full Name	protein kinase C, iota
Background	<p>This gene encodes a member of the protein kinase C (PKC) family of serine/threonine protein kinases. The PKC family comprises at least eight members, which are differentially expressed and are involved in a wide variety of cellular processes. This protein kinase is calcium-independent and phospholipid-dependent. It is not activated by phorbol esters or diacylglycerol. This kinase can be recruited to vesicle tubular clusters (VTCs) by direct interaction with the small GTPase RAB2, where this kinase phosphorylates glyceraldehyde-3-phosphate dehydrogenase (GAPD/GAPDH) and plays a role in microtubule dynamics in the early secretory pathway. This kinase is found to be necessary for BCL-ABL-mediated resistance to drug-induced apoptosis and therefore protects leukemia cells against drug-induced apoptosis. There is a single exon pseudogene mapped on chromosome X. [provided by RefSeq, Jul 2008]</p>
Function	<p>Calcium- and diacylglycerol-independent serine/ threonine-protein kinase that plays a general protective role against apoptotic stimuli, is involved in NF-kappa-B activation, cell survival, differentiation and polarity, and contributes to the regulation of microtubule dynamics in the early secretory pathway. Is necessary for BCR-ABL oncogene-mediated resistance to apoptotic drug in leukemia cells, protecting leukemia cells against drug-induced apoptosis. In cultured neurons, prevents amyloid beta protein-induced apoptosis by interrupting cell death process at a very early step. In glioblastoma cells, may function downstream of phosphatidylinositol 3-kinase (PI(3)K) and PDK1 in the promotion of cell survival by phosphorylating and inhibiting the pro-apoptotic factor BAD. Can form a protein complex in non-small cell lung cancer (NSCLC) cells with PARD6A and ECT2 and regulate ECT2 oncogenic activity by phosphorylation, which in turn promotes transformed growth and invasion. In response to nerve growth factor (NGF), acts downstream of SRC to phosphorylate and activate IRAK1, allowing the subsequent activation of NF-kappa-B and neuronal cell survival. Functions in the organization of the apical domain in epithelial cells by phosphorylating EZR. This step is crucial for activation and normal distribution of EZR at the early stages of intestinal epithelial cell differentiation. Forms a protein complex with LLGL1 and PARD6B independently of PARD3 to regulate epithelial cell polarity. Plays a role in microtubule dynamics in the early secretory pathway through interaction with RAB2A and GAPDH and recruitment to vesicular tubular clusters (VTCs). In human coronary artery endothelial cells (HCAEC), is activated by saturated fatty acids and mediates lipid-induced apoptosis. [UniProt]</p>
Research Area	Signaling Transduction antibody
Calculated Mw	68 kDa
PTM	<p>Phosphorylation at Thr-412 in the activation loop is not mandatory for activation (By similarity). Upon neuronal growth factor (NGF) stimulation, phosphorylated by SRC at Tyr-265, Tyr-280 and Tyr-334. Phosphorylation at Tyr-265 facilitates binding to KPNB1/importin-beta regulating entry of PRKCI into the nucleus. Phosphorylation on Tyr-334 is important for NF-kappa-B stimulation.</p>



ARG55525 anti-PKC iota antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human cancer tissue stained with ARG55525 anti-PKC iota antibody.



ARG55525 anti-PKC iota antibody WB image

Western blot: 2 µg of 293 cell lysate either 1) transiently transfected with PKC iota gene or 2) nontransfected. The blots were stained with ARG55525 anti-PKC iota antibody.