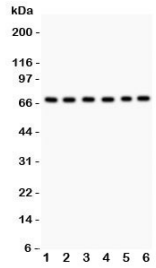
PKC iota Antibody (R31734)

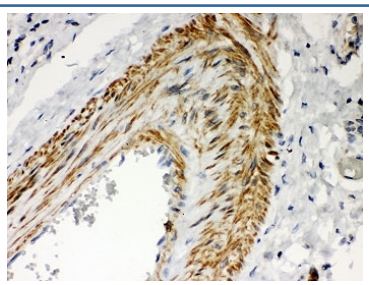
Catalog No.	Formulation	Size
R31734	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

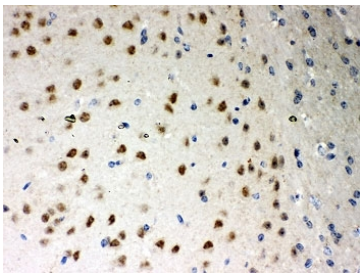
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
Gene ID	5584
Applications	Western blot: 0.5-1ug/ml IHC (FFPE): 0.5-1ug/ml
Limitations	This PKC iota antibody is available for research use only.



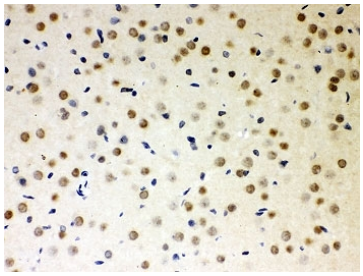
PKC Iota Antibody / PRKCI Antibody WB. Western blot analysis of SHG-44, A549, U87, 293T, HeLa, and Jurkat cell lysates using PKC Iota Antibody / PRKCI Antibody. A single prominent band is detected at approximately 68 kDa in each cell line, consistent with the predicted molecular weight of PRKCI (PKC iota), supporting specific detection of the endogenous protein across multiple human cell types.



PKC Iota Antibody / PRKCI Antibody Human Lung Cancer IHC. Immunohistochemical staining of FFPE human lung cancer tissue using PKC Iota Antibody / PRKCI Antibody. PRKCI expression is observed predominantly within the cytoplasm of tumor cells, consistent with its established role as an atypical serine/threonine kinase involved in cell polarity, intracellular signaling, proliferation, and tumor progression. Heat-induced epitope retrieval was performed prior to immunostaining.



PKC Iota Antibody / PRKCI Antibody Mouse Brain IHC. Immunohistochemical staining of FFPE mouse brain tissue using PKC Iota Antibody / PRKCI Antibody. PRKCI expression is detected predominantly within the nuclei of neuronal cells, consistent with the kinase's involvement in regulating neuronal signaling, cell polarity, and gene regulatory pathways in the central nervous system. Heat-induced epitope retrieval was performed prior to immunostaining.



PKC Iota Antibody / PRKCI Antibody Rat Brain IHC. Immunohistochemical staining of FFPE rat brain tissue using PKC Iota Antibody / PRKCI Antibody. PRKCI expression is detected predominantly within the nuclei of neuronal cells, consistent with its conserved roles in neuronal polarity, intracellular signaling, and regulation of neural development and function. Heat-induced epitope retrieval was performed prior to immunostaining.

Description

PKC iota Antibody specifically binds Protein kinase C iota, also called PKCI, an enzyme that in humans is encoded by the PRKCI gene. This gene encodes a member of the protein kinase C (PKC) family of serine/threonine protein kinases. This protein kinase is calcium-independent and phospholipid-dependent. It is not activated by phorbolesters or diacylglycerol. This kinase can be recruited to vesicle tubular clusters (VTCs) by direct interaction with the small GTPase RAB2, where it phosphorylates glyceraldehyde-3-phosphate dehydrogenase (GAPD/GAPDH) and plays a role in microtubule dynamics in the early secretory pathway. PRKCI is found to be necessary for BCL-ABL-mediated resistance to drug-induced apoptosis and therefore protects leukemia cells against drug-induced apoptosis. It is also a hedgehog target gene that forms a positive feedback loop with GLI and exists at increased levels in basal cell carcinomas.

Learn more about PRKCI biology, signaling functions, and additional validated products on our PRKCI Antibody page.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the PKC iota antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human partial recombinant protein (AA 21-214) was used as the immunogen for this PKC iota antibody.

Storage

After reconstitution, the PKC iota antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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