

For Research Use Only

PKC Iota Monoclonal antibody

Catalog Number: 66493-1-Ig

Featured Product

1 Publications



Basic Information

Catalog Number: 66493-1-Ig	GenBank Accession Number: BC022016	Purification Method: Protein A purification
Size: 150ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 5584	CloneNo.: 3A1B6
Source: Mouse	UNIPROT ID: P41743	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:150-1:600 IF-P 1:200-1:800 IF/ICC 1:400-1:1600
Isotype: IgG2a	Full Name: protein kinase C, iota	
Immunogen Catalog Number: AG4990	Calculated MW: 68 kDa	
	Observed MW: 70 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : MCF-7 cells, HeLa cells, HEK-293 cells, ROS1728 cells, C6 cells, LNCaP cells, Jurkat cells, HSC-T6 cells, RAW 264.7 cells, NIH/3T3 cells

IHC : human lung cancer tissue,

IF-P: human lung cancer tissue,

IF/ICC : HeLa cells,

Background Information

The atypical protein kinase C isoform PRKC iota (PRKCI) is a member of the protein kinase C (PKC) family of serine/threonine protein kinases. PKC family comprises at least eight members, which are differentially expressed and are involved in a wide variety of cellular processes. PRKC iota 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. PRKC iota plays a key role in cell proliferation, differentiation, and carcinogenesis, and it has been shown to be a human oncogene.

Notable Publications

Author	Pubmed ID	Journal	Application
Antja-Voy Hartley	32456215	Int J Mol Sci	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

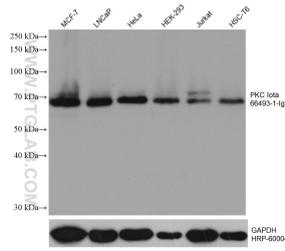
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

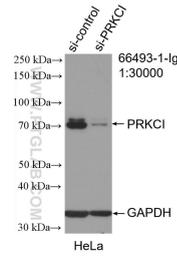
E: proteintech@ptglab.com
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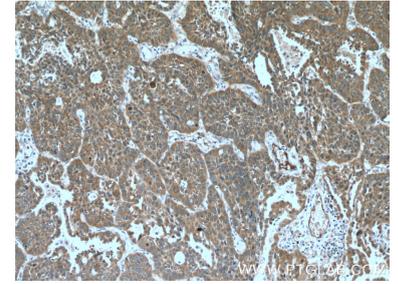
Selected Validation Data



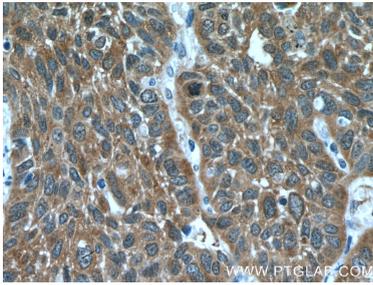
Various lysates were subjected to SDS PAGE followed by western blot with 66493-1-Ig (PKC Iota antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



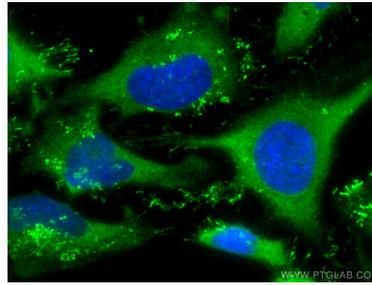
WB result of PKC Iota antibody (66493-1-Ig; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PKC Iota transfected HeLa cells.



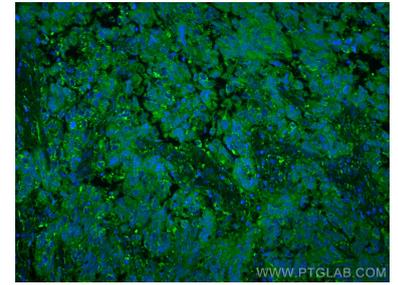
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66493-1-Ig (PKC Iota antibody) at dilution of 1:300 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66493-1-Ig (PKC Iota antibody) at dilution of 1:300 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using PKC Iota antibody (66493-1-Ig, Clone: 3A1B6) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed human lung cancer tissue using PKC Iota antibody (66493-1-Ig, Clone: 3A1B6) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).