

For Research Use Only

# PKC Iota Monoclonal antibody, PBS Only



Catalog Number: 66493-1-PBS

Featured Product

## Basic Information

<b>Catalog Number:</b> 66493-1-PBS	<b>GenBank Accession Number:</b> BC022016	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5584	<b>CloneNo.:</b> 3A1B6
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P41743	
<b>Isotype:</b> IgG2a	<b>Full Name:</b> protein kinase C, iota	
<b>Immunogen Catalog Number:</b> AG4990	<b>Calculated MW:</b> 68 kDa	
	<b>Observed MW:</b> 70 kDa	

## Applications

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

**Species Specificity:**  
human, mouse, rat

## 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.

## Storage

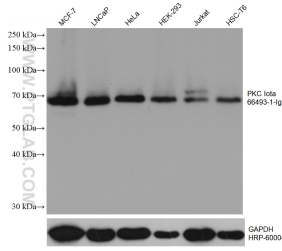
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

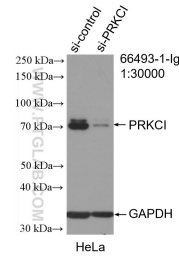
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)      W: [ptglab.com](http://ptglab.com)

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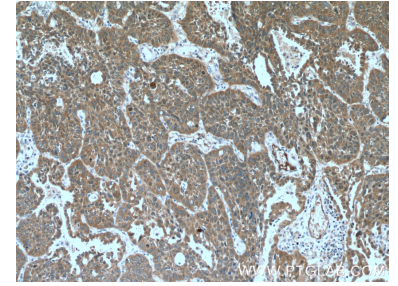
## Selected Validation Data



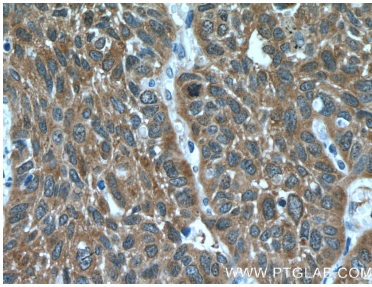
Various lysates were subjected to SDS PAGE followed by western blot with 66493-1-Ig (PKC Iota antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control. This data was developed using the same antibody clone with 66493-1-PBS in a different storage buffer formulation.



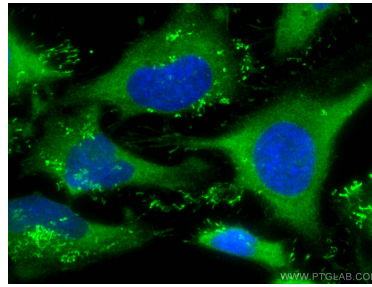
WB result of PKC Iota antibody (66493-1-Ig; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PRK Iota transfected HeLa cells. This data was developed using the same antibody clone with 66493-1-PBS in a different storage buffer formulation.



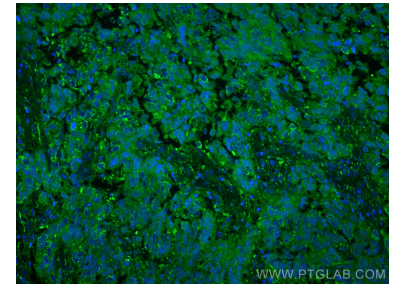
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66493-1-Ig (PKC Iota antibody) at dilution of 1:3000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66493-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66493-1-PBS in a different storage buffer formulation.



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 AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66493-1-PBS in a different storage buffer formulation.



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 AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66493-1-PBS in a different storage buffer formulation.