

For Research Use Only

# PKC Iota Monoclonal antibody, PBS Only



Catalog Number: 66493-1-PBS

Featured Product

## Basic Information

Catalog Number:

66493-1-PBS

Size:

1mg/ml

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG4990

GenBank Accession Number:

BC022016

GeneID (NCBI):

5584

UNIPROT ID:

P41743

Full Name:

protein kinase C, iota

Calculated MW:

68 kDa

Observed MW:

70 kDa

Purification Method:

Protein A purification

CloneNo.:

3A1B6

## 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.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS Only

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

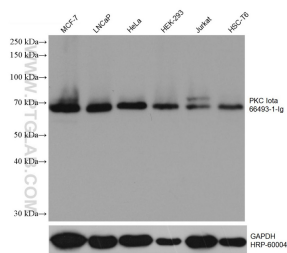
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

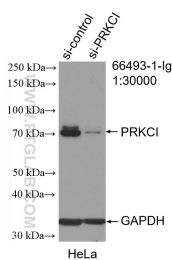
W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

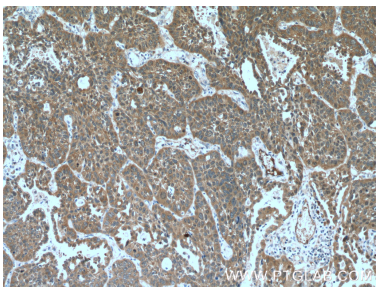
Selected Validation Data



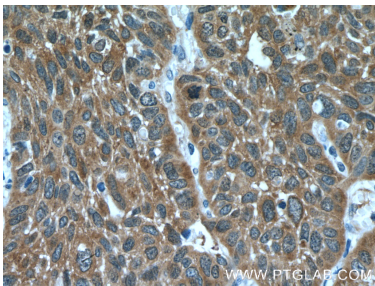
Various lysates were subjected to SDS PAGE followed by western blot with 66493-1-Ig (PKC Iota antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control. This data was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



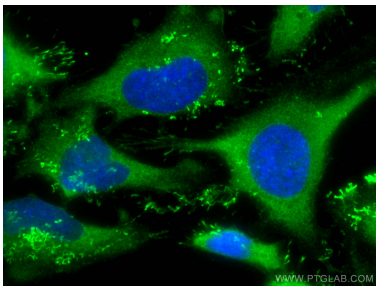
WB result of PKC Iota antibody (66493-1-Ig; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PRKCI transfected HeLa cells. This data was developed using the same antibody clone with 66493-1-PBS in a different storage buffer formulation.



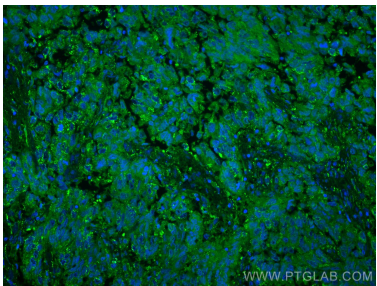
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66493-1-Ig (PKC Iota antibody) at dilution of 1:300 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66493-1-PBS in a different 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.