

For Research Use Only

# CoraLite® Plus 488-conjugated PKC Iota Monoclonal antibody

Catalog Number: CL488-66493

Featured Product



## Basic Information

Catalog Number:

CL488-66493

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

Purification Method:

Protein A purification

CloneNo.:

3A1B6

Recommended Dilutions:

IF/ICC: 1:50-1:500

FC (Intra): 0.80 ug per 10<sup>6</sup> cells in a 100 µl suspension

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

## Applications

Tested Applications:

IF/ICC, FC (Intra)

Species Specificity:

human, mouse, rat

Positive Controls:

IF/ICC : HeLa cells,

FC (Intra) : 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.

## Storage

Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

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

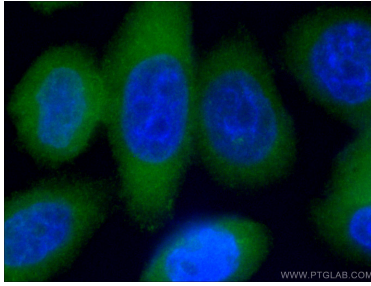
T: 4006900926

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

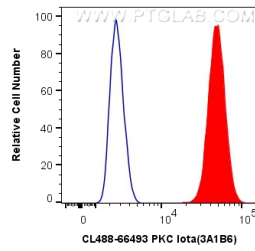
W: [ptgcn.com](http://ptgcn.com)

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## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CL488-66493 (PKC iota antibody) at dilution of 1:50.



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.8 ug CoraLite® Plus 488 Anti-Human PKC Iota (CL488-66493, Clone:3A1B6) (red), or 0.8 ug Mouse IgG2a Isotype Control (CL488-66360-2, Clone: K11A1B2A2) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.