For Research Use Only

CoraLite® Plus 488-conjugated PKC Iota Monoclonal antibody

Catalog Number:

CL488-66493



Catalog Number: CL488-66493 Featured Product

Basic Information

GenBank Accession Number:

BC022016

GeneID (NCBI): 100ul, Concentration: 1000 ug/ml by 5584

Nanodrop: **UNIPROT ID:** P41743

Mouse Full Name:

Isotype: protein kinase C, iota lgG2a Calculated MW:

Immunogen Catalog Number: 68 kDa

AG4990

Applications

Species Specificity: human, mouse, rat

Purification Method:

Protein A purification

CloneNo.: 3A1B6

Recommended Dilutions:

IF/ICC 1:50-1:500

Excitation/Emission maxima

wavelengths:

493 nm / 522 nm

Tested Applications: IF/ICC, FC (Intra)

Positive Controls:

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 phospholipiddependent. 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 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.

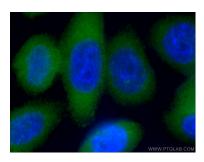
Storage

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

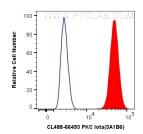
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



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



1X10^6 HeLa cells were intracellularly stained with 0.8 ug CoraLite® Plus 488 Anti-Human PKC lota (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 (PF00011-C).