

# CoraLite® Plus 647-conjugated PKC Iota Monoclonal antibody

Catalog Number: CL647-66493

Featured Product

## Basic Information

**Catalog Number:**

CL647-66493

**Size:**

1 mg/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

**Excitation/Emission maxima wavelengths:**

654 nm / 674 nm

## Applications

**Tested Applications:****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 -20°C. Avoid exposure to light. Stable for one year after shipment.

**Storage Buffer:**

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

Aliquoting is unnecessary for -20°C storage

