

For Research Use Only

# PKC Iota Recombinant antibody, PBS Only (Detector)

Catalog Number: 85733-2-PBS



## Basic Information

<b>Catalog Number:</b> 85733-2-PBS	<b>GenBank Accession Number:</b> BC022016	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5584	<b>CloneNo.:</b> 243126A4
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P41743	
<b>Isotype:</b> IgG	<b>Full Name:</b> protein kinase C, iota	
<b>Immunogen Catalog Number:</b> AG4990	<b>Calculated MW:</b> 68 kDa	
	<b>Observed MW:</b> 67 kDa	

## Applications

**Tested Applications:**  
WB, Sandwich ELISA, Indirect ELISA, Sample test

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

## Product Information

85733-2-PBS targets PKC Iota as part of a matched antibody pair:

MP02074-3: 85733-6-PBS capture and 85733-2-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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.

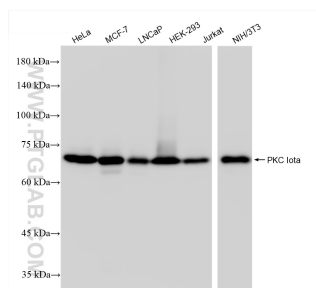
## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS only, pH7.3

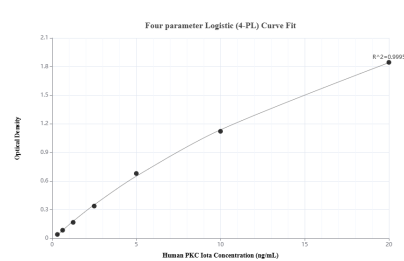
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

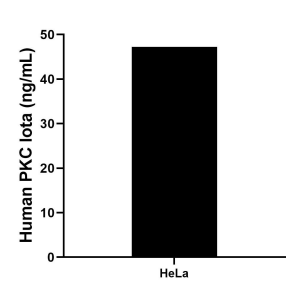
## Selected Validation Data



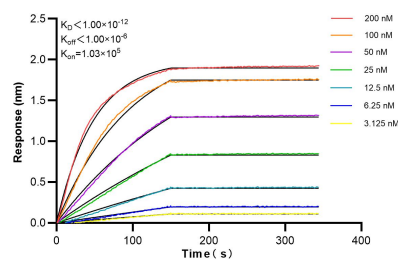
Various lysates were subjected to SDS PAGE followed by western blot with 85733-2-RR (PRKCI antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85733-2-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP02074-3, Human PKC Iota Recombinant Matched Antibody Pair - PBS only. 85733-6-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag4990. 85733-2-PBS was HRP conjugated as the detection antibody. Range: 0.313-20 ng/mL



The mean PKC Iota concentration was determined to be 47.20 ng/mL in HeLa cell extract based on a 3.0 mg/mL extract load.



Biolayer interferometry (BLI) kinetic assays of 85733-2-RR against Human PKC Iota were performed. The affinity constant is below 1 pM.