

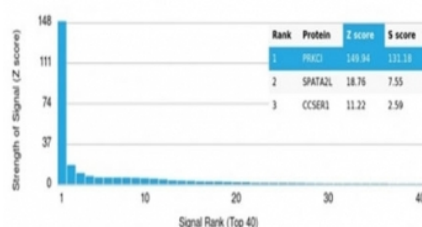
## PKC iota Antibody / PRKCI [clone PRKCI/4912] (V9722)

Catalog No.	Formulation	Size
V9722-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9722-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9722SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

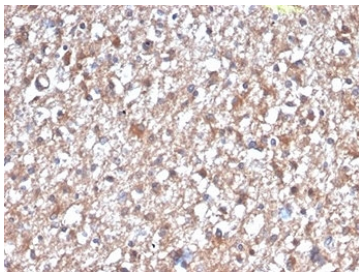
[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	PRKCI/4912
Purity	Protein A/G affinity
UniProt	P41743
Localization	Cytoplasm, Cell Membrane, Nucleus
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This PKC iota antibody is available for research use only.

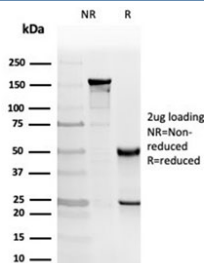
Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using PKC iota antibody (clone PRKCI/4912). These results demonstrate the foremost specificity of the PRKCI/4912 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



IHC staining of FFPE human brain tissue with PKC iota antibody (clone PRKCI/4912).  
HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free PKC iota antibody (clone PRKCI/4912) as confirmation of integrity and purity.

## Description

Members of the protein kinase C (PKC) family play a key regulatory role in a variety of cellular functions, including cell growth and differentiation, gene expression, hormone secretion and membrane function. PKCs were originally identified as serine/threonine protein kinases whose activity was dependent on calcium and phospholipids. Diacylglycerols (DAG) and tumor promoting phorbol esters bind to and activate PKC. PKCs can be subdivided into at least two major classes, including conventional (c) PKC isoforms ( $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$ ,  $\epsilon$ ,  $\zeta$ ,  $\eta$ ,  $\theta$ ,  $\iota$ ,  $\kappa$  and  $\lambda$ ). Patterns of expression for each PKC isoform differ among tissues and PKC family members exhibit clear differences in their cofactor dependencies. For instance, the kinase activities of PKC  $\delta$  and  $\epsilon$  are independent of  $Ca^{2+}$ . On the other hand, most of the other PKC members possess phorbol ester-binding activities and kinase activities.

## Application Notes

Optimal dilution of the PKC iota antibody should be determined by the researcher.

## Immunogen

A portion of amino acids 100-300 was used as the immunogen for the PKC iota antibody.

## Storage

Aliquot the PKC iota antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.