

Datasheet for ABIN967942

## anti-PKC delta antibody (AA 114-289)

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### Overview

Quantity:	50 µg
Target:	PKC delta (PKCd)
Binding Specificity:	AA 114-289
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

### Product Details

Immunogen:	Human PKCdelta aa. 114-289
Clone:	14-PKC delta
Isotype:	IgG2b
Cross-Reactivity:	Rat (Rattus), Mouse (MURINE)
Characteristics:	<ol style="list-style-type: none"> <li>1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.</li> <li>2. Please refer to us for technical protocols.</li> <li>3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.</li> <li>4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.</li> </ol>
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

## Product Details

chromatography.

## Target Details

Target:	PKC delta (PKCd)
Alternative Name:	PKC delta ( <a href="#">PKCd Products</a> )
Background:	<p>The Protein Kinase C (PKC) family of homologous serine/threonine protein kinases. At least eleven isozymes have been described. These proteins are products of multiple genes and alternative splicing. PKC consists of a single polypeptide chain containing four conserved regions (C) and five variable regions (V). The N-terminal half containing C1, C2, V1, and V2 constitutes the regulatory domain and interacts with PKC activators Ca<sup>2+</sup>, phospholipid, diacylglycerol, or phorbol ester. However, the novel PKC (nPKC) subfamily members (delta, epsilon, eta, and theta isoforms) and the atypical PKC (aPKC) subfamily members (zeta, iota, and lambda isoforms) are Ca<sup>2+</sup> independent and lack the C2 domain. The aPKC members are unique in that their activity is independent of diacylglycerols and phorbol esters. They also lack one repeat of the cysteine-rich sequences that are conserved in cPKC and nPKC. The C-terminal region of PKC contains the catalytic domain. PKCdelta is involved in myeloid differentiation, as well as in the secretory response of antigen-stimulated rat basophilic RBL 2H3 cells. Overexpression and subsequent stimulation of PKCdelta leads to cell cycle arrest in CHO cells and complete growth inhibition of NIH 3T3 cells. PKCdelta is the most abundant isoform in hemopoietic cells and is highly expressed in many other organs and tissues. This suggests that PKCdelta may be one of the major PKC isozymes in mammalian cells.</p>
Molecular Weight:	78 kDa
Pathways:	<a href="#">Interferon-gamma Pathway</a> , <a href="#">EGFR Signaling Pathway</a> , <a href="#">Neurotrophin Signaling Pathway</a> , <a href="#">Thyroid Hormone Synthesis</a> , <a href="#">Regulation of Actin Filament Polymerization</a> , <a href="#">Carbohydrate Homeostasis</a> , <a href="#">Myometrial Relaxation and Contraction</a> , <a href="#">M Phase</a> , <a href="#">G-protein mediated Events</a> , <a href="#">Dicarboxylic Acid Transport</a> , <a href="#">Positive Regulation of Response to DNA Damage Stimulus</a> , <a href="#">Interaction of EGFR with phospholipase C-gamma</a> , <a href="#">Thromboxane A2 Receptor Signaling</a> , <a href="#">Lipid Metabolism</a>

## Application Details

Comment:	Related Products: ABIN968545
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20° C.

## Publications

Product cited in:

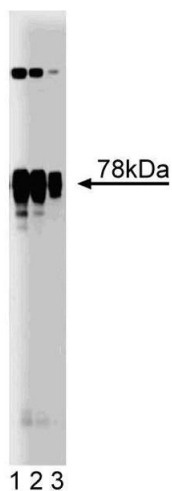
Larsen, Ueyama, Brannock, Shirai, Saito, Larsson, Loegering, Weber, Lennartz: "A role for PKC-epsilon in Fc gammaR-mediated phagocytosis by RAW 264.7 cells." in: **The Journal of cell biology**, Vol. 159, Issue 6, pp. 939-44, (2002) ([PubMed](#)).

Ringshausen, Schneller, Bogner, Hipp, Duyster, Peschel, Decker: "Constitutively activated phosphatidylinositol-3 kinase (PI-3K) is involved in the defect of apoptosis in B-CLL: association with protein kinase Cdelta." in: **Blood**, Vol. 100, Issue 10, pp. 3741-8, (2002) ([PubMed](#)).

Blass, Kronfeld, Kazimirsky, Blumberg, Brodie: "Tyrosine phosphorylation of protein kinase Cdelta is essential for its apoptotic effect in response to etoposide." in: **Molecular and cellular biology**, Vol. 22, Issue 1, pp. 182-95, (2001) ([PubMed](#)).

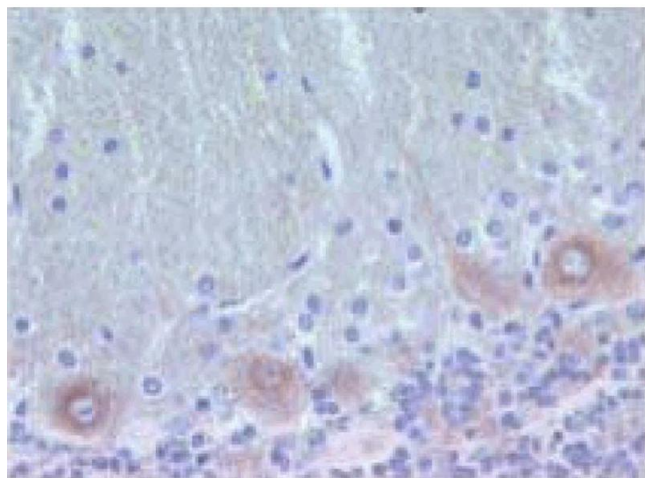
Bell, Burns: "Lipid activation of protein kinase C." in: **The Journal of biological chemistry**, Vol. 266, Issue 8, pp. 4661-4, (1991) ([PubMed](#)).

Nishizuka: "The molecular heterogeneity of protein kinase C and its implications for cellular regulation." in: **Nature**, Vol. 334, Issue 6184, pp. 661-5, (1988) ([PubMed](#)).



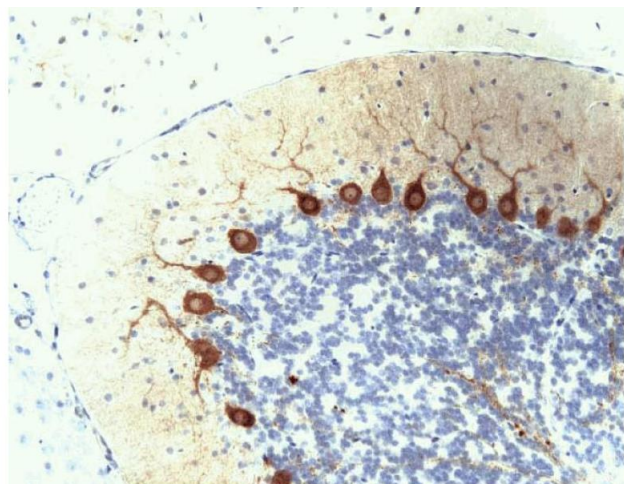
#### Western Blotting

**Image 1.** Western blot analysis of PKCdelta on rat brain lysate. Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of PKCdelta.



#### Immunohistochemistry (Paraffin-embedded Sections)

**Image 2.** Rat brain zinc-fixed paraffin-embedded tissue



#### Immunohistochemistry (Paraffin-embedded Sections)

**Image 3.** Purkinje Cells in rat cerebellum, formalin-fixed paraffin-embedded tissue, citrate pre-treatment, 40X