

Datasheet for ABIN3043360  
**anti-PKC delta antibody (AA 1-160)**



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1 Image 1 Publication

## Overview

|                      |   |
|----------------------|---|
| Quantity:            | 100 µg  |
| Target:              | PKC delta (PKCd)  |
| Binding Specificity: | AA 1-160  |
| Reactivity:          | Human   |
| Host:                | Rabbit  |
| Clonality:           | Polyclonal  |
| Conjugate:           | This PKC delta antibody is un-conjugated                                  |
| Application:         | Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC) |

## Product Details

|                             |   |
|-----------------------------|---|
| Purpose:                    | Anti-PKC delta/PRKCD Antibody Picoband®   |
| Immunogen:                  | E.coli-derived human PKC delta recombinant protein (Position: M1-E160). Human PKC delta shares 95% and 93% amino acid (aa) sequence identity with mouse and rat PKC delta, respectively.  |
| Isotype:                    | IgG   |
| Cross-Reactivity (Details): | No cross-reactivity with other proteins   |
| Characteristics:            | Anti-PKC delta/PRKCD Antibody (ABIN3043360). Tested in IF, ICC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance. |

## Product Details

Purification: Immunogen affinity purified.

## Target Details

Target: PKC delta (PKCd)

Alternative Name: PRKCD ([PKCd Products](#))

Background: Synonyms: Protein kinase C delta type,2.7.11.13,Tyrosine-protein kinase PRKCD,2.7.10.2,nPKC-delta,Protein kinase C delta type regulatory subunit,Protein kinase C delta type catalytic subunit,Sphingosine-dependent protein kinase-1,SDK1,PRKCD,

Tissue Specificity: Localized at tight junctions of both epithelial and endothelial cells. Highly expressed in kidney. Not detected in testis.

Background: Protein kinase C delta type, also called PKCD, is an enzyme that in humans is encoded by the PRKCD gene. The PRKCD gene encodes a member of the protein kinase C family, members of which are critical for regulation of cell survival, proliferation, and apoptosis. This gene is mapped to 3p21.1. Studies both in human and mice demonstrate that this kinase is involved inB cell signaling and in the regulation of growth, apoptosis, and differentiation of a variety of cell types. PRKCD is also regulated by phosphorylation on various tyrosine residues including Y311 (by SRC). It has been showed that PRKCD phosphorylates NLRC4 and that this phosphorylation is critical for inflammasome assembly. What's more, it is also a part of a noncanonical WNT signaling cascade.

Sequence Similarities: Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily.

Molecular Weight: 77 kDa

Gene ID: 5580

UniProt: [Q05655](#)

Pathways: [Interferon-gamma Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Thyroid Hormone Synthesis](#), [Regulation of Actin Filament Polymerization](#), [Carbohydrate Homeostasis](#), [Myometrial Relaxation and Contraction](#), [M Phase](#), [G-protein mediated Events](#), [Dicarboxylic Acid Transport](#), [Positive Regulation of Response to DNA Damage Stimulus](#), [Interaction of EGFR with phospholipase C-gamma](#), [Thromboxane A2 Receptor Signaling](#), [Lipid Metabolism](#)

## Application Details

Application Notes: Western blot, 0.1-0.5 µg/mL, Human

Immunocytochemistry/Immunofluorescence, 2 µg/mL, Human

## Application Details

1. Qu, Y., Misaghi, S., Izrael-Tomasevic, A., Newton, K., Gilmour, L. L., Lamkanfi, M., Louie, S., Kayagaki, N., Liu, J., Komuves, L., Cupp, J. E., Arnott, D., Monack, D., Dixit, V. M. Phosphorylation of NLRC4 is critical for inflammasome activation. *Nature* 490: 539-542, 2012. 2. Salzer, E., Santos-Valente, E., Klaver, S., Ban, S. A., Emminger, W., Prengemann, N. K., Garncarz, W., Mullauer, L., Kain, R., Boztug, H., Heitger, A., Arbeiter, K., Eitelberger, F., Seidel, M. G., Holter, W., Pollak, A., Pickl, W. F., Forster-Waldl, E., Boztug, K. B-cell deficiency and severe autoimmunity caused by deficiency of protein kinase C-delta. *Blood* 121: 3112-3116, 2013. 3. Tu, X., Joeng, K. S., Nakayama, K. I., Nakayama, K., Rajagopal, J., Carroll, T. J., McMahon, A. P., Long, F. Noncanonical Wnt signaling through G protein-linked PKC-delta activation promotes bone formation. *Dev. Cell* 12: 113-127, 2007.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB.

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg 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.

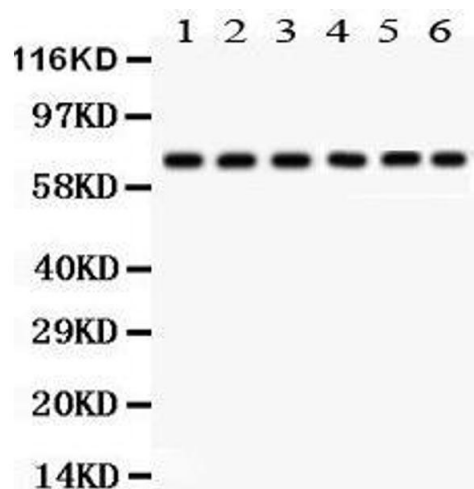
Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C, -20 °C

Storage Comment: Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

## Publications

Product cited in: Gan, Wang, Zhao, Wu, Yang, Peng: "5-(Bis(3-(2-hydroxyethyl)-1H-indol-2-yl)methyl)-2-hydroxybenzoic acid (BHIMHA): showing a strategy of designing drug to block lung metastasis of tumors." in: **Drug design, development and therapy**, Vol. 10, pp. 711-21, (2016) ([PubMed](#)).



**Western Blotting**

**Image 1.** nti- PKC delta antibody, Western blotting All lanes: Anti PKC delta at 0.5ug/ml Lane 1: HELA Whole Cell Lysate at 40ug Lane 2: SMMC Whole Cell Lysate at 40ug Lane 3: U87 Whole Cell Lysate at 40ug Lane 4: JURKAT Whole Cell Lysate at 40ug Lane 5: CEM Whole Cell Lysate at 40ug Lane 6: A549 Whole Cell Lysate at 40ug Predicted bind size: 77KD Observed bind size: 77KD