abcam

Product datasheet

# Anti-PKC zeta (phospho T410) + PKC iota (phospho T412) antibody [EP1491Y] ab76129

Recombinant RabMAb

4 References 9 Images

## Overview

| | |
|---|---|
| **Product name** | Anti-PKC zeta (phospho T410) + PKC iota (phospho T412) antibody [EP1491Y] |
| **Description** | Rabbit monoclonal [EP1491Y] to PKC zeta (phospho T410) + PKC iota (phospho T412) |
| **Host species** | Rabbit |
| **Specificity** | This antibody detects PKC zeta and PKC lamda phosphorylated at T410/412 respectively.<br>This antibody also detects various PKC phosphorylated isoforms. |
| **Tested applications** | **Suitable for:** IHC-P, WB<br>**Unsuitable for:** IP |
| **Species reactivity** | **Reacts with:** Mouse, Rat, Human |
| **Immunogen** | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| **Positive control** | 293 cell lysate, human brain tissue; HeLa cells. |
| **General notes** | This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. |

## Properties

| | |
|---|---|
| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. |
| **Storage buffer** | pH: 7.20<br>Preservative: 0.01% Sodium azide<br>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA |
| **Purity** | Protein A purified |

| | |
|---|---|
| **Clonality** | Monoclonal |
| **Clone number** | EP1491Y |
| **Isotype** | IgG |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab76129 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

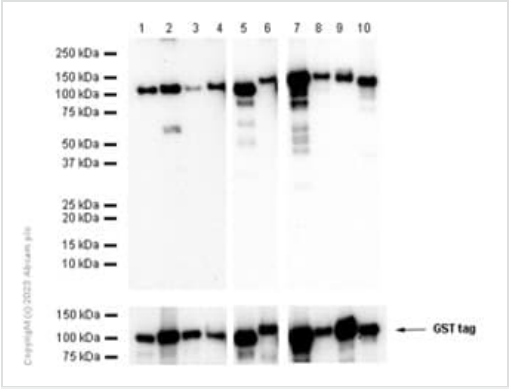
| Application | Abreviews | Notes |
|---|---|---|
| **IHC-P** | | 1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.<br>See **IHC antigen retrieval protocols**. |
| **WB** | | 1/20000. Predicted molecular weight: 68 kDa.<br>**For unpurified, use 1/1000 - 1/2000.** |

**Application notes** Is unsuitable for IP.

## Target

**Cellular localization** PKC zeta: Cytoplasm. Endosome. Cell junction. In the retina, localizes in the terminals of the rod bipolar cells (By similarity). Associates with endosomes. Presence of KRIT1, CDH5 and RAP1B is required for its localization to the cell junction. PKC iota: Cytoplasm. Membrane. Endosome. Nucleus. Transported into the endosome through interaction with SQSTM1/p62. After phosphorylation by cSrc, transported into the nucleus through interaction with KPNB1. Colocalizes with CDK7 in the cytoplasm and nucleus. Vesicular tubular clusters. Transported to VTCs through interaction with RAB2A.

## Images




Western blot - Anti-PKC zeta (phospho T410) + PKC lambda (phospho T412) antibody [EP1491Y] (ab76129)

**All lanes :** Anti-PKC zeta (phospho T410) + PKC iota (phospho T412) antibody [EP1491Y] (ab76129) at 1/1000 dilution

**Lane 1 :** Recombinant human PKC alpha protein (Active) (**ab55672**)
**Lane 2 :** Recombinant human PKC beta 1 protein (**ab60840**)
**Lane 3 :** Recombinant human PKC beta 2 protein (**ab60841**)
**Lane 4 :** Recombinant human PKC gamma protein (**ab60842**)
**Lane 5 :** Recombinant human PKC delta protein (**ab60844**)
**Lane 6 :** Recombinant human PKC epsilon protein (**ab60847**)
**Lane 7 :** Recombinant human PKC zeta protein (**ab60848**)
**Lane 8 :** Recombinant human PKC eta protein (**ab60849**)
**Lane 9 :** Recombinant human PKC theta/PRKCQ protein

(**ab56641**)

**Lane 10 :** Recombinant human PKC iota protein (**ab60850**)

**Secondary**

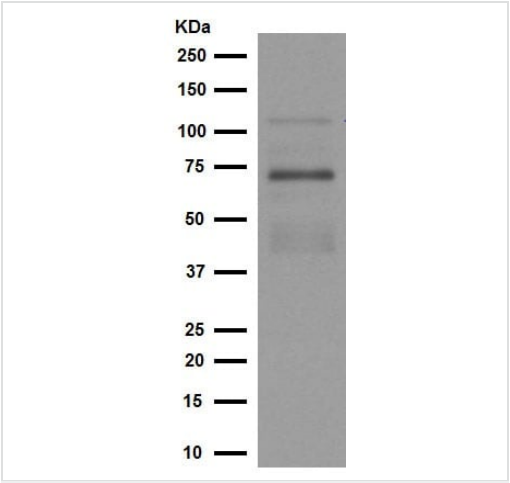
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 68 kDa

**Observed band size:** 105 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Exposure time: Lane 1-4: 180 seconds; Lane 5-6: 60 seconds; Lane 7-10: 5 seconds.




Western blot - Anti-PKC zeta (phospho T410) + PKC lambda (phospho T412) antibody [EP1491Y] (ab76129)

Anti-PKC zeta (phospho T410) + PKC iota (phospho T412) antibody [EP1491Y] (ab76129) at 1/20000 dilution (purified) + Mouse lung tissue lysate at 10 µg

**Secondary**

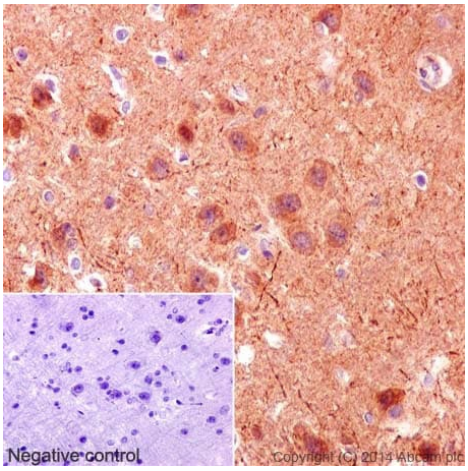
HRP goat anti-rabbit (H+L) at 1/1000 dilution

**Predicted band size:** 68 kDa

**Observed band size:** 74 kDa

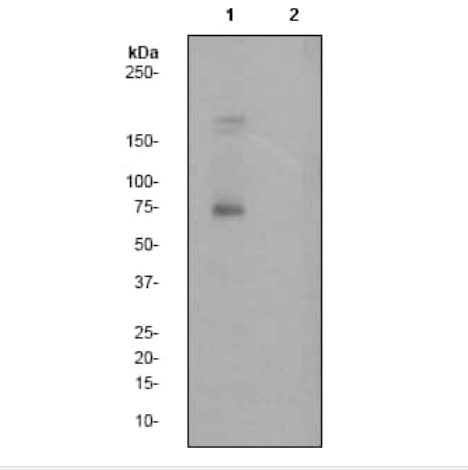
Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC zeta (phospho T410) + PKC lambda (phospho T412) antibody [EP1491Y] (ab76129)

Immunohistochemical staining of paraffin embedded rat cerebral cortex with purified ab76129 at a working dilution of 1 in 100. The secondary antibody used is a HRP goat anti-rabbit IgG (**ab97051**), used at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.




Western blot - Anti-PKC zeta (phospho T410) + PKC lambda (phospho T412) antibody [EP1491Y] (ab76129)

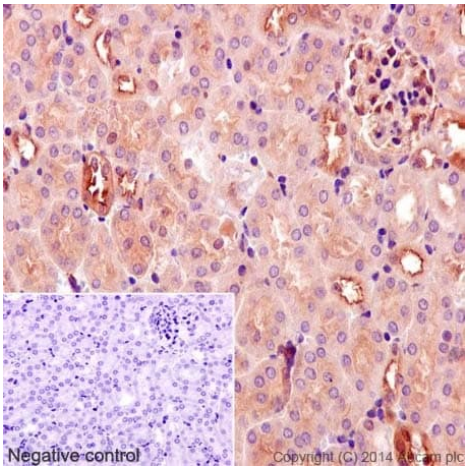
**All lanes :** Anti-PKC zeta (phospho T410) + PKC iota (phospho T412) antibody [EP1491Y] (ab76129) at 1/2000 dilution (unpurified)

**Lane 1 :** 293 cell lysates, untreated
**Lane 2 :** 293 cell lysates, treated with AP

Lysates/proteins at 10 µg per lane.

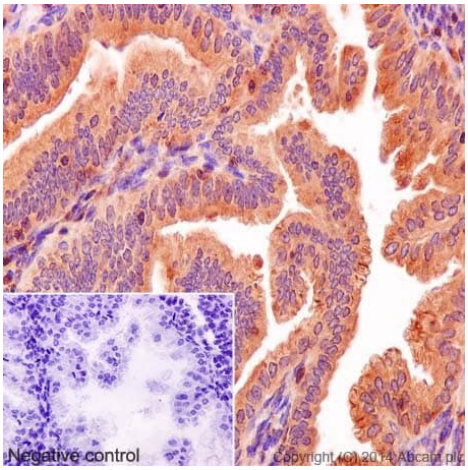
**Secondary**
**All lanes :** goat anti-rabbit-HRP at 1/1000 dilution

**Predicted band size:** 68 kDa
**Observed band size:** 68 kDa
**Additional bands at:** 165 kDa, 170 kDa. We are unsure as to the identity of these extra bands.



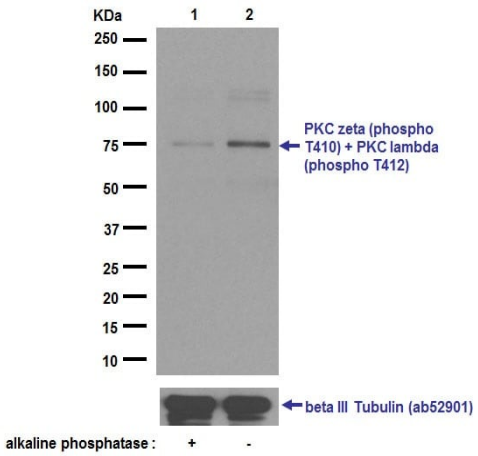

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC zeta (phospho T410) + PKC lambda (phospho T412) antibody [EP1491Y] (ab76129)

Immunohistochemical staining of paraffin embedded mouse kidney with purified ab76129 at a working dilution of 1 in 100. The secondary antibody used is a HRP goat anti-rabbit IgG (**ab97051**), used at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC zeta (phospho T410) + PKC lambda (phospho T412) antibody [EP1491Y] (ab76129)

Immunohistochemical staining of paraffin embedded human endometrium with purified ab76129 at a working dilution of 1 in 100. The secondary antibody used is a HRP goat anti-rabbit IgG (**ab97051**), used at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.




Western blot - Anti-PKC zeta (phospho T410) + PKC lambda (phospho T412) antibody [EP1491Y] (ab76129)

**All lanes :** Anti-PKC zeta (phospho T410) + PKC iota (phospho T412) antibody [EP1491Y] (ab76129) at 1/20000 dilution (purified)

**Lane 1 :** Untreated HeLa cell lysate

**Lane 2 :** HeLa cell lysate treated with alkaline phosphatase

Lysates/proteins at 10 µg per lane.

**Secondary**

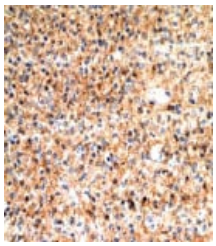
**All lanes :** HRP goat anti-rabbit (H+L) at 1/1000 dilution

**Predicted band size:** 68 kDa

**Additional bands at:** 74 kDa. We are unsure as to the identity of these extra bands.

Blocking buffer: 5% NFDM/TBST

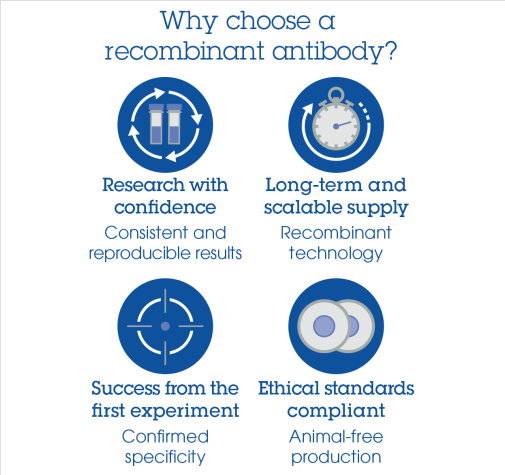
Dilution buffer: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC zeta (phospho T410) + PKC lambda (phospho T412) antibody [EP1491Y] (ab76129)

Immunohistochemical staining of PKC zeta in human brain with unpurified ab76129 at 1/100 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.




Anti-PKC zeta (phospho T410) + PKC lambda (phospho T412) antibody [EP1491Y] (ab76129)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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