

Product datasheet

Anti-PKC zeta antibody [EP1490(2)] ab108970

KO VALIDATED RabMAb

[1 Abreviews](#) [1 References](#) [3 Images](#)

Overview

Product name	Anti-PKC zeta antibody [EP1490(2)]
Description	Rabbit monoclonal [EP1490(2)] to PKC zeta
Host species	Rabbit
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt, ICC/IF, IHC-P or IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	293T, HT-29 and fetal liver lysates
General notes	Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents . The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1490(2)

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab108970 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

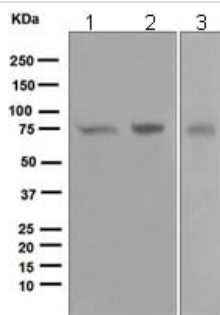
Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 74 kDa.

Application notes Is unsuitable for Flow Cyt, ICC/IF, IHC-P or IP.

Target

Function	This is a calcium-independent, phospholipid-dependent, serine- and threonine-specific enzyme. Phosphorylates 'Ser-311' of RELA subunit of NF-kappa-B. PKC is activated by diacylglycerol which in turn phosphorylates a range of cellular proteins. PKC also serves as the receptor for phorbol esters, a class of tumor promoters. Subunit of a quaternary complex that plays a central role in epithelial cell polarization.
Tissue specificity	Expressed in brain, and to a lesser extent in lung, kidney and testis.
Sequence similarities	Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily. Contains 1 AGC-kinase C-terminal domain. Contains 1 OPR domain. Contains 1 phorbol-ester/DAG-type zinc finger. Contains 1 protein kinase domain.
Domain	The OPR domain mediates mutually exclusive interactions with SQSTM1 and PARD6B. The C1 domain does not bind the diacylglycerol (DAG).
Post-translational modifications	CDH5 is required for its phosphorylation at Thr-410.
Cellular localization	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.

Images



Western blot - Anti-PKC zeta antibody [EP1490(2)]
(ab108970)

All lanes : Anti-PKC zeta antibody [EP1490(2)] (ab108970) at
1/1000 dilution

Lane 1 : 293T lysate

Lane 2 : HT-29 lysate

Lane 3 : Fetal liver lysate

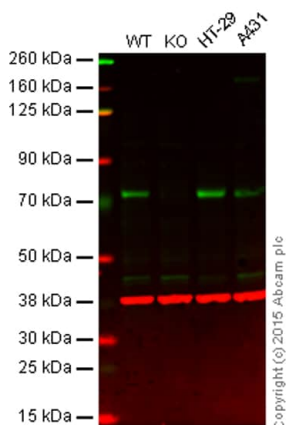
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 74 kDa

Observed band size: 74 kDa



Western blot - Anti-PKC zeta antibody [EP1490(2)]
(ab108970)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

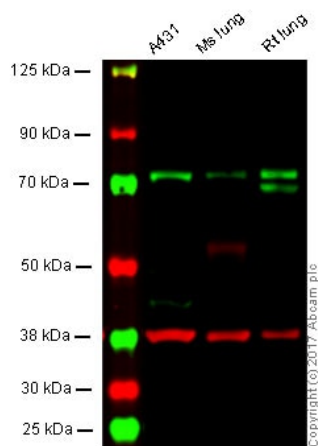
Lane 2: PKC zeta knockout HAP1 cell lysate (20 µg)

Lane 3: HT-29 cell lysate (20 µg)

Lane 4: A431 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab108970
observed at 74 kDa. Red - loading control, **ab8226**, observed at 42
kDa.

ab108970 was shown to specifically react with PKC zeta when
PKC zeta knockout samples were used. Wild-type and PKC
zeta knockout samples were subjected to SDS-PAGE. ab108970
and **ab8226** (loading control to beta actin) were both diluted 1/1000
and incubated overnight at 4°C. Blots were developed with Goat
anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**)
and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed
(**ab216776**) secondary antibodies at 1/10000 dilution for 1 h at
room temperature before imaging.



Western blot - Anti-PKC zeta antibody [EP1490(2)]
(ab108970)

All lanes : Anti-PKC zeta antibody [EP1490(2)] (ab108970) at 1/1000 dilution

Lane 1 : A431 whole cell lysate

Lane 2 : Mouse lung tissue lysate

Lane 3 : Rat lung tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 74 kDa

Observed band size: 74 kDa

Lanes 1 - 3: Merged signal (red and green). Green - ab108970 observed at 74 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using Licor blocking buffer before being incubated with ab108970 and [ab8245](#) (loading control) overnight at 4°C. Antibody binding was detected using Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) at a 1:10000 dilution for 1hr at room temperature and then imaged.

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

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