

Product datasheet

Anti-PKD2 (phospho S876) antibody [EP1496Y] - BSA and Azide free ab246493

Recombinant RabMAb

[1 References](#) [5 Images](#)

Overview

Product name	Anti-PKD2 (phospho S876) antibody [EP1496Y] - BSA and Azide free
Description	Rabbit monoclonal [EP1496Y] to PKD2 (phospho S876) - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, IP Unsuitable for: Flow Cyt or ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IP: HeLa cell lysate. WB: HeLa treated with 100nM calyculin A, HEK-293 treated with 100nM calyculin A IP: ab246493 + HEK-293 (Human embryonic kidney epithelial cell) treated with 50nM Calyculin A for 3 hours whole cell lysate.
General notes	<p>ab246493 is the carrier-free version of ab51251.</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information [see here](#).

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1496Y
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab246493 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		Use at an assay dependent concentration. Detects a band of approximately 105 kDa (predicted molecular weight: 97 kDa).
IP		Use at an assay dependent concentration.

Application notes Is unsuitable for Flow Cyt or ICC/IF.

Target

Function	Converts transient diacylglycerol (DAG) signals into prolonged physiological effects, downstream of PKC. Involved in resistance to oxidative stress.
Tissue specificity	Widely expressed.
Sequence similarities	Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. PKD subfamily. Contains 1 PH domain. Contains 2 phorbol-ester/DAG-type zinc fingers. Contains 1 protein kinase domain.

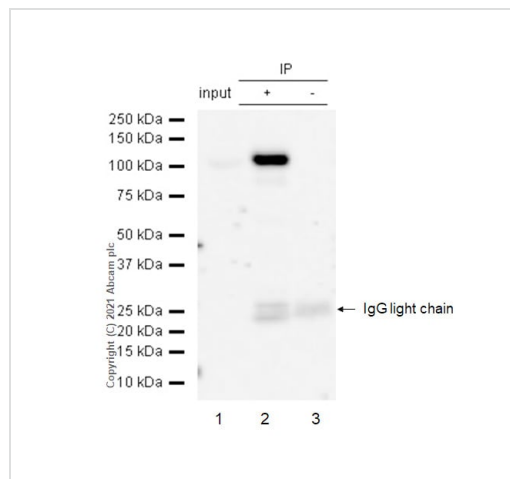
Post-translational modifications

Phosphorylation of Ser-876 correlates with the activation status of the kinase. Ser-706 is probably phosphorylated by PKC.

Cellular localization

Cytoplasm. Membrane. Translocation to the cell membrane is required for kinase activation.

Images



Immunoprecipitation - Anti-PKD2 (phospho S876) antibody [EP1496Y] - BSA and Azide free (ab246493)

This data was developed using abab246493, the same antibody clone in a different buffer formulation.

Purified ab246493 at 1:20 dilution (0.6µh) immunoprecipitating PKD2 in HEK-293 (Human embryonic kidney epithelial cell) treated with 50nM Calyculin A for 3 hours whole cell lysate.

Lane 1 (input): HEK-293 (Human embryonic kidney epithelial cell) treated with 50nM Calyculin A for 3 hours whole cell lysate 10µg
Lane 2 (+): ab246493 + HEK-293 (Human embryonic kidney epithelial cell) treated with 50nM Calyculin A for 3 hours whole cell lysate.

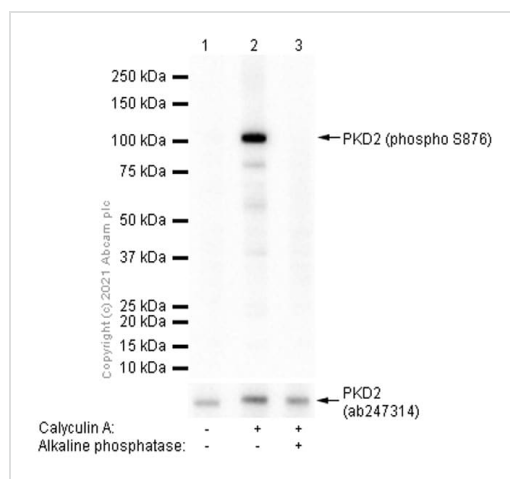
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab51251** in HEK-293 treated with 50nM Calyculin A for 3 hours whole cell lysate.

VeriBlot for IP Detection Reagent (HRP)TM (**ab131366**) (1:1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm/TBST.

Observed band size: 105 kDa



Western blot - Anti-PKD2 (phospho S876) antibody [EP1496Y] - BSA and Azide free (ab246493)

All lanes : Anti-PKD2 (phospho S876) antibody [EP1496Y] (**ab51251**) at 1/1000 dilution (Purified)

Lane 1 : untreated HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2 : HeLa (Human cervix adenocarcinoma epithelial cell) starved overnight and treated with 100nM calyculin A for 60 minutes whole cell lysate

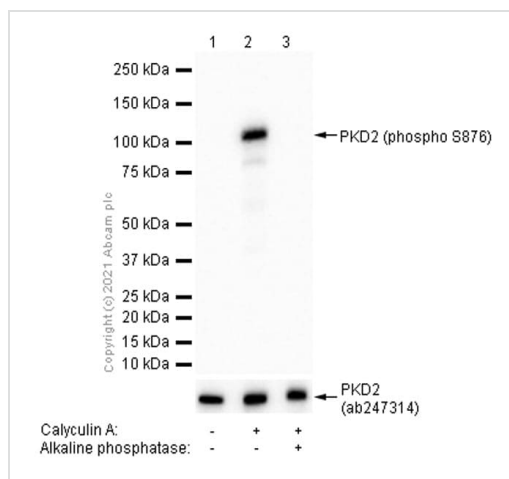
Lane 3 : HeLa (Human cervix adenocarcinoma epithelial cell) starved overnight and treated with 100nM calyculin A for 60 minutes whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

Secondary

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

Predicted band size: 97 kDa

Observed band size: 105 kDa



Western blot - Anti-PKD2 (phospho S876) antibody [EP1496Y] - BSA and Azide free (ab246493)

All lanes : Anti-PKD2 (phospho S876) antibody [EP1496Y] (**ab51251**) at 1/1000 dilution (Purified)

Lane 1 : untreated HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate

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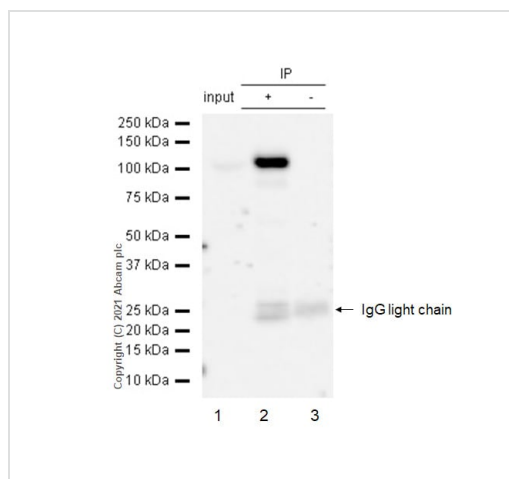
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Immunoprecipitation - Anti-PKD2 (phospho S876) antibody [EP1496Y] - BSA and Azide free (ab246493)

This data was developed using **ab51251**, the same antibody clone in a different buffer formulation.

PKD2 was immunoprecipitated from 0.35 mg HeLa (Human cervix adenocarcinoma epithelial cell) starve overnight, then treated with TPA(200nM 4h) whole cell lysate 10 µg with **ab51251** at 1/20 dilution (0.6µg). VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used at 1/5000 dilution.

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) starve overnight, then treated with TPA(200nM 4h) whole cell lysate 10 µg

Lane 2: ab51251 IP in HeLa starve overnight, then treated with TPA(200nM 4h) whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab51251** in HeLa starve overnight, then treated with TPA(200nM 4h) whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-PKD2 (phospho S876) antibody [EP1496Y] -
BSA and Azide free (ab246493)

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

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