abcam

Product datasheet

Anti-PKN antibody [EPR3237] - BSA and Azide free ab247729



Recombinant

RabMAb

4 Images

Overview

Immunogen

Product name Anti-PKN antibody [EPR3237] - BSA and Azide free

Description Rabbit monoclonal [EPR3237] to PKN - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: IHC-P, WB

Unsuitable for: Flow Cyt

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HEK293T, SH-SY5Y, Jurkat and Human spleen lysates. IHC-P: Human brain tissue.

General notes ab247729 is the carrier-free version of **ab108976**.

Our <u>carrier-free</u> 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.

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.

Use our <u>conjugation kits</u> 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.

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.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- 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

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 EPR3237

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab247729 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		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.
WB		Use at an assay dependent concentration. Detects a band of approximately 120 kDa (predicted molecular weight: 104 kDa).

Application notes Is unsuitable for Flow Cyt.

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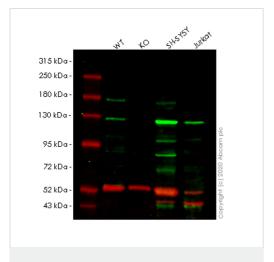
Relevance PKN belongs to the protein kinase C superfamily. This kinase is activated by Rho family of small

G proteins and may mediate the Rho-dependent signaling pathway. This kinase can be activated by phospholipids and by limited proteolysis. The 3-phosphoinositide dependent protein kinase-1 (PDPK1/PDK1) is reported to phosphorylate this kinase, which may mediate insulin signals to the actin cytoskeleton. The proteolytic activation of this kinase by caspase-3 or related proteases

during apoptosis suggests its role in signal transduction related to apoptosis.

Cellular localization Cytoplasmic

Images



Western blot - Anti-PKN antibody [EPR3237] - BSA and Azide free (ab247729)

All lanes : Anti-PKN antibody [EPR3237] (<u>ab108976</u>) at 1/1000 dilution

Lane 1: Wild-type HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate Lane 2: PKN1 knockout HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate Lane 3: SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate

Lane 4: Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

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

Predicted band size: 104 kDa **Observed band size:** 120 kDa

This data was developed using <u>ab108976</u>, the same antibody clone in a different buffer formulation.

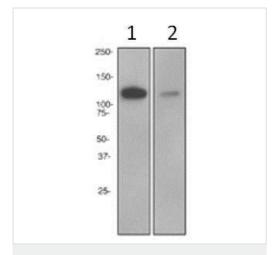
Lanes 1-4: Merged signal (red and green). Green - <u>ab108976</u> observed at 120 kDa. Red - loading control <u>ab7291</u> observed at 50 kDa.

ab108976 Anti-PKN antibody [EPR3237] was shown to specifically react with PKN in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line ab266599 (knockout cell lysate ab258586) was used. Wild-type and PKN knockout samples were subjected to SDS-PAGE. ab108976 and Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PKN antibody [EPR3237] - BSA and Azide free (ab247729)

This data was developed using <u>ab108976</u>, the same antibody clone in a different buffer formulation.lmmunohistochemical analysis of PKN in paraffin embedded Human brain tissue, using <u>ab108976</u> at a 1/100 dilution. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-PKN antibody [EPR3237] - BSA and Azide free (ab247729)

All lanes : Anti-PKN antibody [EPR3237] (**ab108976**) at 1/1000 dilution

Lane 1: Jurkat lysates

Lane 2: Human spleen lysates

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 104 kDa **Observed band size:** 120 kDa

This data was developed using <u>ab108976</u>, the same antibody clone in a different buffer formulation.



Anti-PKN antibody [EPR3237] - BSA and Azide free (ab247729)

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