abcam

Product datasheet

Anti-PKN2 antibody [EPR5490] ab138514

KO VALIDATED Recombinant RabMAb

4 References 5 Images

Overview

Product name	Anti-PKN2 antibody [EPR5490]
Description	Rabbit monoclonal [EPR5490] to PKN2
Host species	Rabbit
Tested applications	**Suitable for:** WB, ICC/IF **Unsuitable for:** Flow Cyt,IHC-P or IP
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat
Immunogen	Synthetic peptide within Human PKN2 aa 900-1000. The exact sequence is proprietary.
Positive control	WB: HCT116, HEK-293T, Jurkat, HeLa, and HepG2 (**ab7900**) cell lysates. ICC/IF: HeLa cells.
General notes	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 monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR5490

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab138514 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. Detects a band of approximately 112 kDa (predicted molecular weight: 112 kDa).
ICC/IF		1/100 - 1/250.

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

Target

Function Exhibits a preference for highly basic protein substrates.

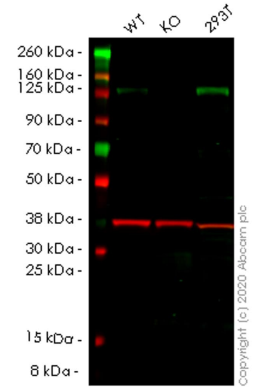
Sequence similarities Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily.
Contains 1 AGC-kinase C-terminal domain.
Contains 1 C2 domain.
Contains 1 protein kinase domain.
Contains 3 REM (Hr1) repeats.

Domain The C1 domain does not bind the diacylglycerol (DAG).

Post-translational modifications Autophosphorylated.
Activated by limited proteolysis with trypsin.

Cellular localization Cytoplasm.

Images



Western blot - Anti-PKN2 antibody [EPR5490] (ab138514)

All lanes : Anti-PKN2 antibody [EPR5490] (ab138514) at 1/1000 dilution

Lane 1 : Wild-type HCT 116 (Human colorectal carcinoma cell line) whole cell lysate
Lane 2 : PKN2 knockout HCT 116 (Human colorectal carcinoma cell line) whole cell lysate
Lane 3 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lysates/proteins at 20 µg per lane.

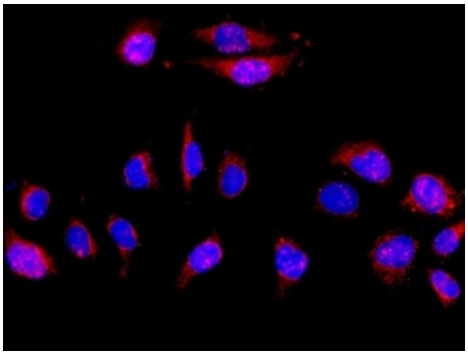
Secondary
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW)

preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 112 kDa
Observed band size: 125 kDa

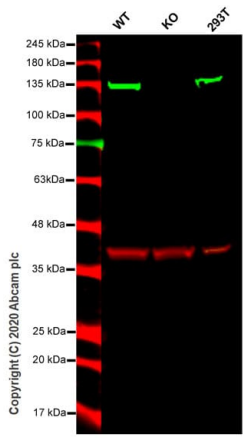
Lanes 1-3: Merged signal (red and green). Green - ab138514 observed at 125 kDa. Red - loading control **ab8245** observed at 36 kDa.

ab138514 Anti-PKN2 antibody [EPR5490] (ab138514) was shown to specifically react with PKN2 in wild-type HCT cells. Loss of signal was observed when knockout cell line **ab266894** (knockout cell lysate **ab258588**) was used. Wild-type and PKN2 knockout samples were subjected to SDS-PAGE. ab138514 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. 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 in 20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-PKN2 antibody [EPR5490] (ab138514)

Immunofluorescent analysis of HeLa cells labelling PKN2 with ab138514 at 1/100 dilution.



Western blot - Anti-PKN2 antibody [EPR5490] (ab138514)

All lanes : Anti-PKN2 antibody [EPR5490] (ab138514) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : PKN2 knockout HeLa cell lysate
Lane 3 : HEK-293T cell lysate

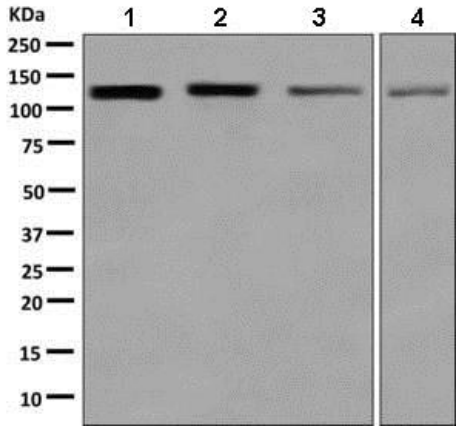
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 112 kDa
Observed band size: 112 kDa

Lanes 1-3: Merged signal (red and green). Green - ab138514 observed at 112 kDa. Red - loading control, **ab8245** observed at 37 kDa.

ab138514 Anti-PKN2 antibody [EPR5490] was shown to specifically react with PKN2 in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab264691** (knockout cell lysate **ab258587**) was used. Wild-type and PKN2 knockout samples were subjected to SDS-PAGE. ab138514 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. 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 in 10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-PKN2 antibody [EPR5490] (ab138514)

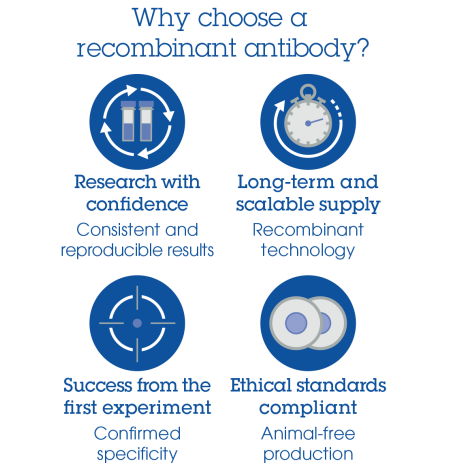
All lanes : Anti-PKN2 antibody [EPR5490] (ab138514) at 1/1000 dilution

Lane 1 : 293T cell lysate
Lane 2 : Jurkat cell lysate
Lane 3 : HeLa cell lysate
Lane 4 : HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

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

Predicted band size: 112 kDa
Observed band size: 112 kDa



Anti-PKN2 antibody [EPR5490] (ab138514)

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