

Product datasheet

Anti-Peroxiredoxin 3/PRDX3 antibody ab73349

KO VALIDATED

★★★★☆ 6 Abreviews 23 References 4 Images

Overview

Product name	Anti-Peroxiredoxin 3/PRDX3 antibody
Description	Rabbit polyclonal to Peroxiredoxin 3/PRDX3
Host species	Rabbit
Tested applications	Suitable for: IHC-P, ICC/IF, WB
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Chicken, Cow, Xenopus laevis, Chimpanzee, Zebrafish, Orangutan
Immunogen	Synthetic peptide corresponding to Human Peroxiredoxin 3/PRDX3 aa 200 to the C-terminus conjugated to keyhole limpet haemocyanin. (Peptide available as ab85815)
Positive control	Recombinant human Peroxiredoxin 3/PRDX3 protein (ab85559) can be used as a positive control in WB. This antibody gave a positive signal in the following lysates: Human, Mouse and Rat Liver, Rat Ovary.
General notes	This product was previously labelled as Peroxiredoxin 3



Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab73349** in the following tested applications.

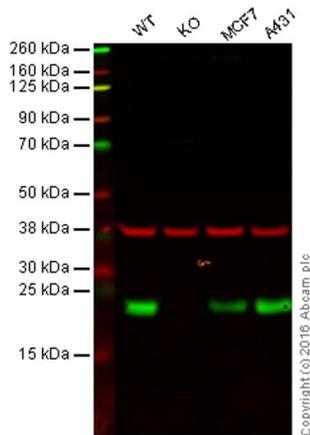
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★	Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF		Use a concentration of 5 µg/ml.
WB	★★★★★	Use a concentration of 1 µg/ml. Detects a band of approximately 23 kDa (predicted molecular weight: 28 kDa).

Target

Function	Involved in redox regulation of the cell. Protects radical-sensitive enzymes from oxidative damage by a radical-generating system. Acts synergistically with MAP3K13 to regulate the activation of NF-kappa-B in the cytosol.
Sequence similarities	Belongs to the ahpC/TSA family. Contains 1 thioredoxin domain.
Cellular localization	Mitochondrion.

Images



Western blot - Anti-Peroxiredoxin 3/PRDX3 antibody (ab73349)

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

Lane 2: Peroxiredoxin 3/PRDX3 knockout HAP1 cell lysate (20 µg)

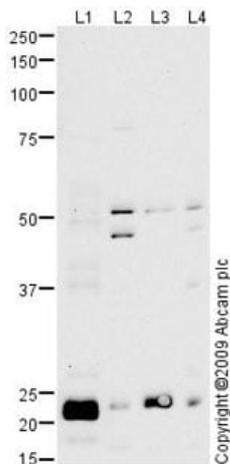
Lane 3: MCF7 cell lysate (20 µg)

Lane 4: A431 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green -

ab73349 observed at 24 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab73349 was shown to specifically react with Peroxiredoxin 3/PRDX3 in wild-type HAP1 cells. No band was observed when Peroxiredoxin 3/PRDX3 knockout samples were examined. Wild-type and Peroxiredoxin 3/PRDX3 knockout samples were subjected to SDS-PAGE. ab73349 and ab8245 (loading control to GAPDH) were diluted at 1 µg/ml and 1/10,000 respectively 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 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Peroxiredoxin 3/PRDX3 antibody (ab73349)

All lanes : Anti-Peroxiredoxin 3/PRDX3 antibody (ab73349) at 1 µg/ml

Lane 1 : Human liver tissue lysate - total protein (ab29889)

Lane 2 : Liver (Rat) Tissue Lysate

Lane 3 : Ovary (Rat) Tissue Lysate

Lane 4 : Liver (Mouse) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

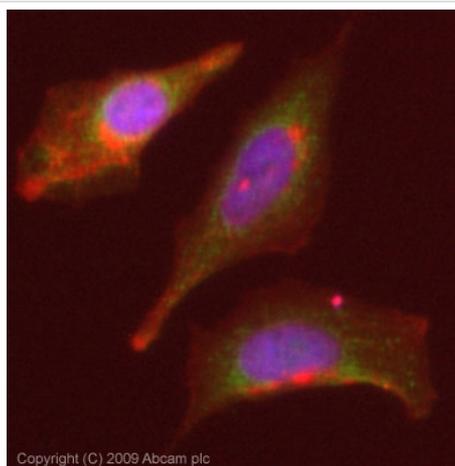
Performed under reducing conditions.

Predicted band size: 28 kDa

Observed band size: 23 kDa

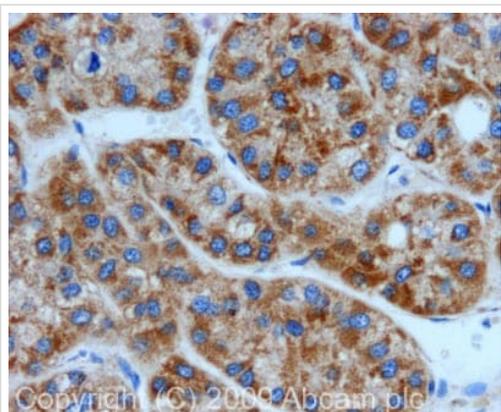
[why is the actual band size different from the predicted?](#)

Additional bands at: 45 kDa, 52 kDa. We are unsure as to the identity of these extra bands.



Immunocytochemistry/ Immunofluorescence - Anti-Peroxiredoxin 3/PRDX3 antibody (ab73349)

ICC/IF image of ab73349 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab73349, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 4% PFA fixed (10 min) Hek293, HepG2 and MCF7 cells at 5µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Peroxiredoxin 3/PRDX3 antibody (ab73349)

IHC image of Peroxiredoxin 3/PRDX3 staining in human liver carcinoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab73349, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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