

Product datasheet

Anti-Peroxiredoxin 5 antibody [EPR14528(B)] ab180123

KO VALIDATED Recombinant RabMAb

5 Images

Overview

Product name	Anti-Peroxiredoxin 5 antibody [EPR14528(B)]
Description	Rabbit monoclonal [EPR14528(B)] to Peroxiredoxin 5
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF, Flow Cyt, IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Peroxiredoxin 5 aa 50-150. The exact sequence is proprietary. Database link: P30044
Positive control	HepG2, HeLa, Jurkat and A549 cell lysates; 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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 0.05% BSA, 40% Glycerol
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR14528(B)

Isotype

IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab180123** 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		1/10000 - 1/20000. Detects a band of approximately 17 kDa (predicted molecular weight: 22 kDa).
ICC/IF		1/250.
Flow Cyt		1/10. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IP		1/60.

Target

Function

Reduces hydrogen peroxide and alkyl hydroperoxides with reducing equivalents provided through the thioredoxin system. Involved in intracellular redox signaling.

Tissue specificity

Widely expressed.

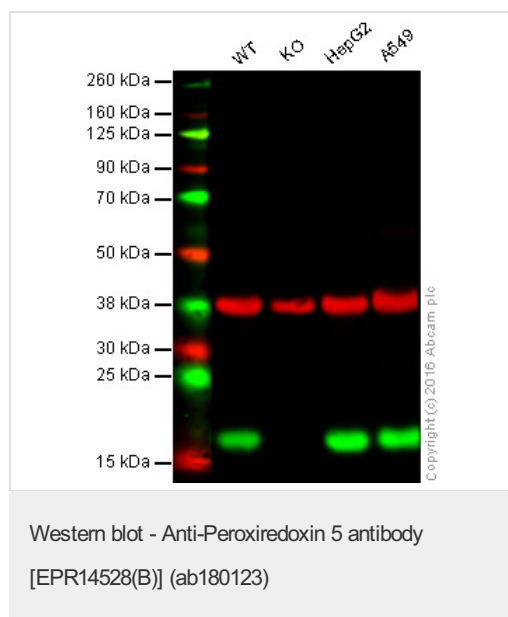
Sequence similarities

Belongs to the peroxiredoxin 2 family.
Contains 1 thioredoxin domain.

Cellular localization

Mitochondrion. Cytoplasm. Peroxisome.

Images



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

Lane 2: PRDX5 knockout HAP1 whole cell lysate (20 µg)

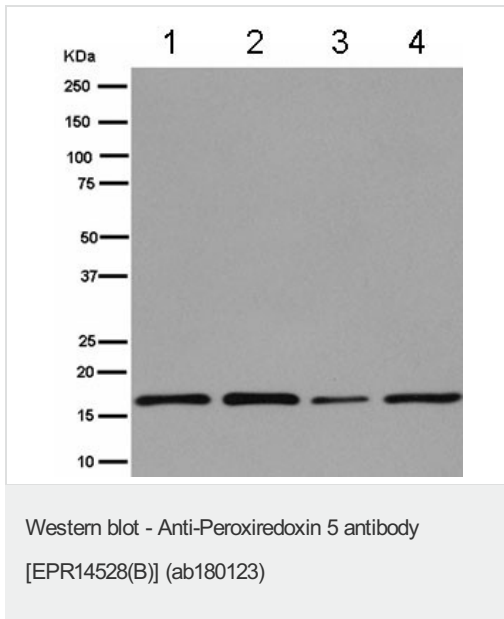
Lane 3: HepG2 whole cell lysate (20 µg)

Lane 4: A549 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab180123 observed at 17 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

ab180123 was shown to specifically react with PRDX5 when PRDX5 knockout samples were used. Wild-type and PRDX5 knockout samples were subjected to SDS-PAGE. Ab180123 and [ab8245](#) (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 10000 dilution and 1/10000 dilution respectively. Blots were developed with 800CW Goat anti Rabbit and 680CW

Goat anti Mouse secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



All lanes : Anti-Peroxiredoxin 5 antibody [EPR14528(B)] (ab180123) at 1/20000 dilution

Lane 1 : HepG2 cell lysate

Lane 2 : HeLa cell lysate

Lane 3 : Jurkat cell lysate

Lane 4 : A549 cell lysate

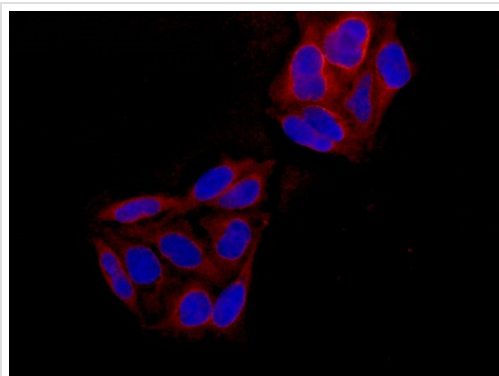
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

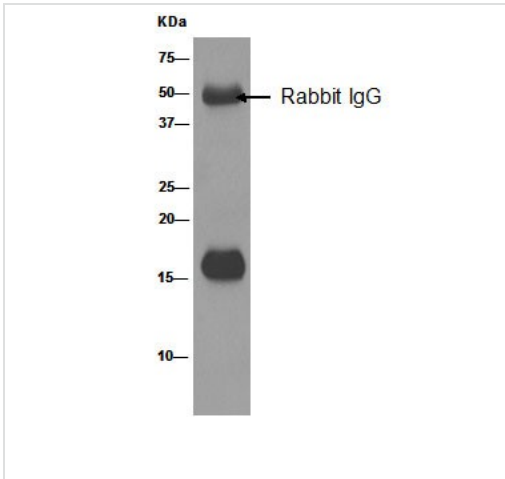
Predicted band size: 22 kDa

Additional bands at: 17 kDa. We are unsure as to the identity of these extra bands.



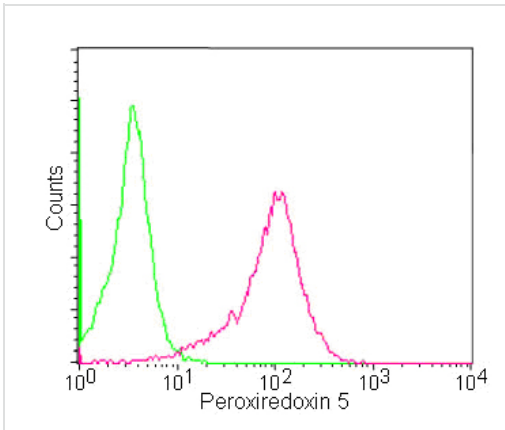
Immunocytochemistry/ Immunofluorescence - Anti-Peroxiredoxin 5 antibody [EPR14528(B)] (ab180123)

Immunofluorescent analysis of 4% paraformaldehyde-fixed HeLa cells labeling Peroxiredoxin 5 with ab180123 at 1/250 dilution, followed by Goat anti rabbit IgG (Dylight 555) at 1/250 dilution. Counterstained with DAPI (blue).



Western Blot analysis of HeLa cell lysate immunoprecipitated with ab180123 at 1/60 dilution, using Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated secondary antibody at 1/1000 dilution.

Immunoprecipitation - Anti-Peroxiredoxin 5 antibody
[EPR14528(B)] (ab180123)



Flow cytometric analysis of 2% paraformaldehyde-fixed HeLa cells labeling Peroxiredoxin 5 with ab180123 at 1/10 dilution (red) compared to a rabbit IgG control (green), followed by Goat anti rabbit IgG (FITC) at 1/75 dilution.

Flow Cytometry - Anti-Peroxiredoxin 5 antibody
[EPR14528(B)] (ab180123)

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