


Product datasheet

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

KO VALIDATED Recombinant RabMAB

[1 References](#) [6 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: Flow Cyt (Intra), WB, ICC/IF, IP |
| Species reactivity | Reacts with: Human Predicted to work with: Mouse, Rat  |
| 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: <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 . |

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 (glycerin, glycerine) |
| Purity | Tissue culture supernatant |
| Clonality | Monoclonal |
| Clone number | EPR14528(B) |
| Isotype | IgG |

Applications

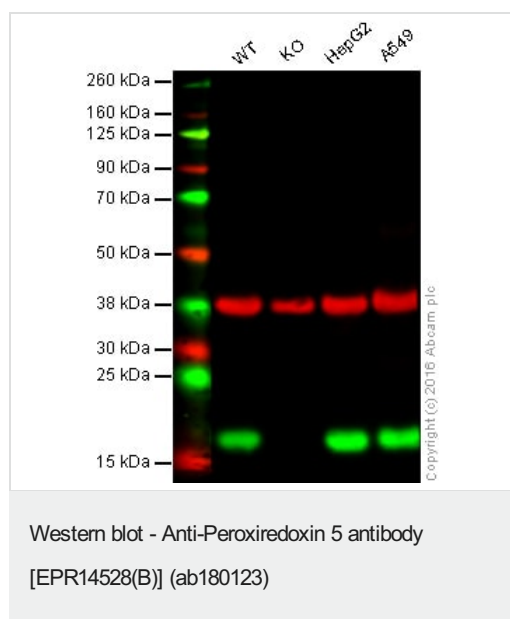
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab180123 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|------------------|-----------|---|
| Flow Cyt (Intra) | | 1/10. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. |
| WB | | 1/10000 - 1/20000. Detects a band of approximately 17 kDa (predicted molecular weight: 22 kDa). |
| ICC/IF | | 1/250. |
| 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)

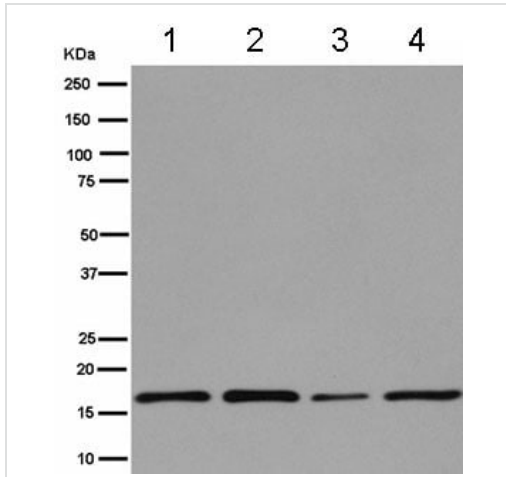
Lane 3: HepG2 whole cell lysate (20 µg)

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.



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

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

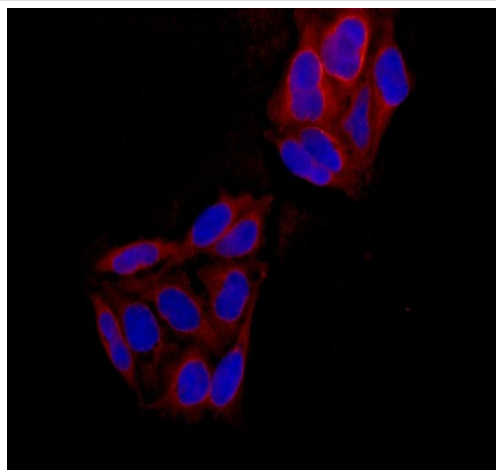
Lysates/proteins at 20 µg per lane.

Secondary

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

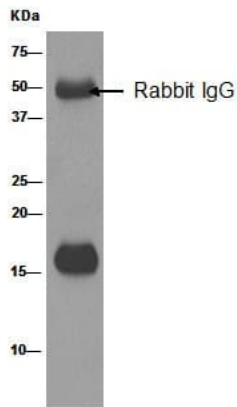
Predicted band size: 22 kDa

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



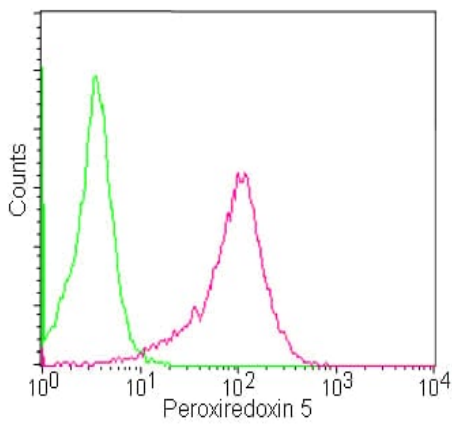
Immunocytochemistry/ Immunofluorescence - Anti-Peroxiredoxin 5 antibody [EPR14528(B)] (ab180123)

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)



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

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

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