

Anti-Peroxiredoxin 5 antibody [EPR14529(B)] ab180587

敲除验证
重组
RabMAb

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概述

产品名称	Anti-Peroxiredoxin 5抗体[EPR14529(B)]
描述	兔单克隆抗体[EPR14529(B)] to Peroxiredoxin 5
宿主	Rabbit
特异性	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
经测试应用	适用于: WB, IHC-P, IP
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	HeLa, HepG2 and A549 cell line lysates; Human kidney tissue; Jurkat cells.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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 <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

性能

形式	Liquid
存放说明	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.
存储溶液	<p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR14529(B)
同种型	IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab180587于以下的经测试应用

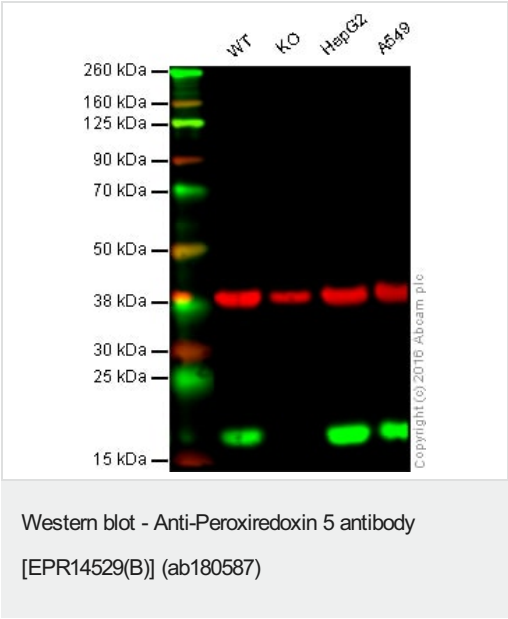
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/1000 - 1/10000. Detects a band of approximately 17 kDa (predicted molecular weight: 22 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat. See IHC antigen retrieval protocols
IP		1/50.

靶标

功能	Reduces hydrogen peroxide and alkyl hydroperoxides with reducing equivalents provided through the thioredoxin system. Involved in intracellular redox signaling.
组织特异性	Widely expressed.
序列相似性	Belongs to the peroxiredoxin 2 family. Contains 1 thioredoxin domain.
细胞定位	Mitochondrion. Cytoplasm. Peroxisome.

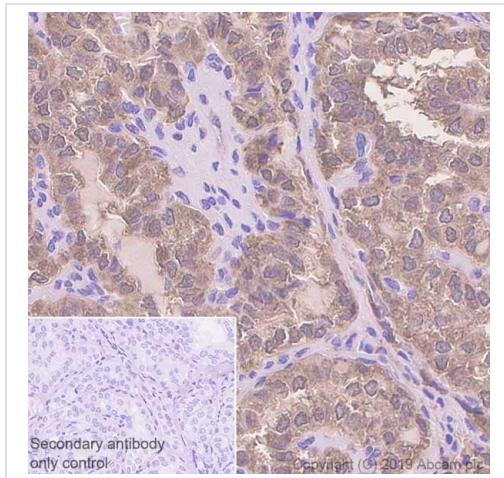
图片



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 - ab180587 observed at 17 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

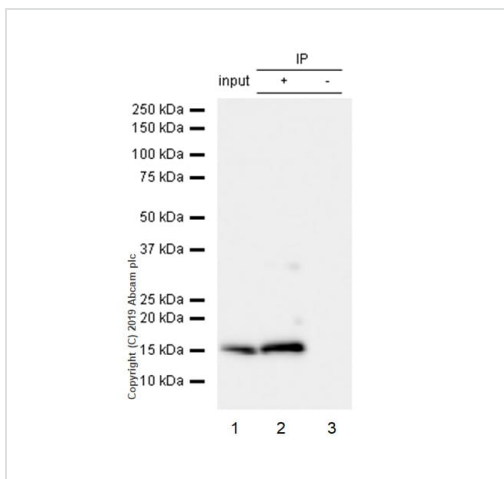
ab180587 was shown to specifically react with PRDX5 when PRDX5 knockout samples were used. Wild-type and PRDX5 knockout samples were subjected to SDS-PAGE. Ab180587 and **ab8245** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1000 dilution and 1/10000 dilution respectively. Blots 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.



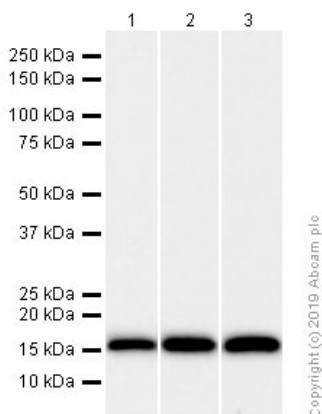
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thyroid carcinoma tissue sections labeling Peroxiredoxin 5 with purified ab180587 at 1:500 dilution (1.18 µg/ml). Heat mediated antigen retrieval was performed using Bond™ Epitope Retrieval Solution 1 (pH 6.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Peroxiredoxin 5 antibody [EPR14529(B)] (ab180587)



ab180587 (Purified) at 1:30 dilution (2 µg) immunoprecipitating Peroxiredoxin 5 in HeLa whole cell lysate.
 Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10 µg
 Lane 2 (+): ab180587 & HeLa whole cell lysate
 Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab180587 in HeLa whole cell lysate
 For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used at 1:1000 dilution.
 Blocking and diluting buffer: 5% NFDM/TBST.

Immunoprecipitation - Anti-Peroxiredoxin 5 antibody [EPR14529(B)] (ab180587)



Western blot - Anti-Peroxiredoxin 5 antibody
[EPR14529(B)] (ab180587)

All lanes : Anti-Peroxiredoxin 5 antibody [EPR14529(B)]
(ab180587) at 1/10000 dilution (Purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell)
whole cell lysates

Lane 2 : Human brain lysates

Lane 3 : Rat brain lysates

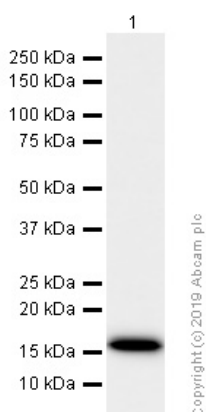
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000
dilution

Predicted band size: 22 kDa

Observed band size: 17 kDa



Western blot - Anti-Peroxiredoxin 5 antibody
[EPR14529(B)] (ab180587)

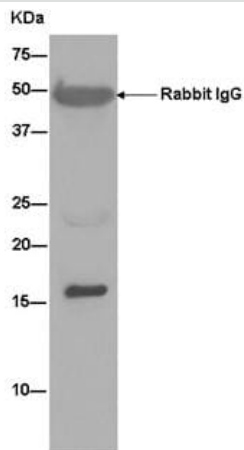
Anti-Peroxiredoxin 5 antibody [EPR14529(B)] (ab180587) at
1/5000 dilution (Purified) + Mouse brain lysates at 15 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 22 kDa

Observed band size: 17 kDa



Immunoprecipitation - Anti-Peroxiredoxin 5 antibody [EPR14529(B)] (ab180587)

Immunoprecipitation analysis of Peroxiredoxin 5 pulled down from HeLa cell lysates using ab180587 at 1/50 dilution.

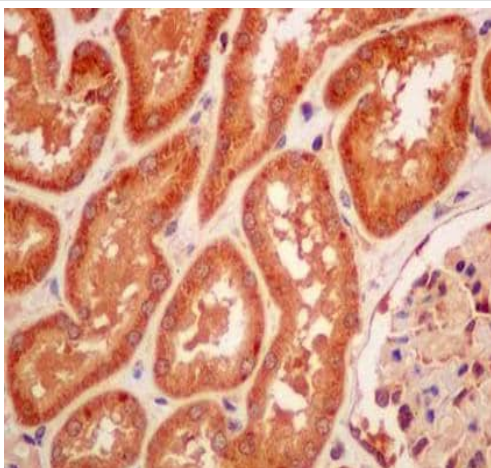
Anti-Peroxiredoxin 5 antibody [EPR14529(B)] (ab180587) at 1/1000 dilution (Unpurified) + HeLa cell immunoprecipitated with ab180587 at 1/50.

Secondary

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

Observed band size: 17 kDa

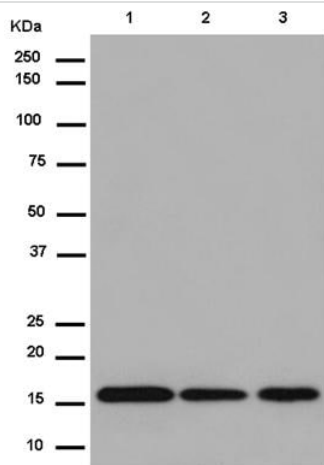
Additional bands at: 50 kDa (possible IgG)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Peroxiredoxin 5 antibody [EPR14529(B)] (ab180587)

Immunohistochemical analysis of paraffin embedded Human kidney tissue labeling Peroxiredoxin 5 with unpurified ab180587 at 1/250.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Peroxiredoxin 5 antibody
[EPR14529(B)] (ab180587)

All lanes : Anti-Peroxiredoxin 5 antibody [EPR14529(B)]
(ab180587) at 1/5000 dilution (Unpurified)

Lane 1 : HepG2 cell line lysate

Lane 2 : Jurkat cell line lysate

Lane 3 : A549 cell line lysate

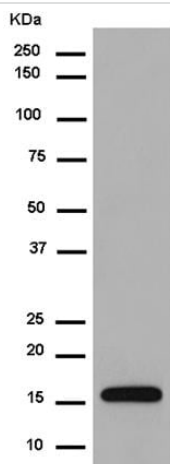
Lysates/proteins at 20 µg per lane.

Secondary

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

Predicted band size: 22 kDa

Observed band size: 17 kDa



Western blot - Anti-Peroxiredoxin 5 antibody
[EPR14529(B)] (ab180587)

Anti-Peroxiredoxin 5 antibody [EPR14529(B)] (ab180587) at
1/20000 dilution (Unpurified) + HeLa cell line lysate at 20 µg

Secondary

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

Predicted band size: 22 kDa

Observed band size: 17 kDa

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
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Anti-Peroxiredoxin 5 antibody [EPR14529(B)]
(ab180587)

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