abcam

Product datasheet

Anti-Peroxiredoxin 2/PRP antibody [EPR5154] ab109367

KO 評価済 リコンビナント RabMAb

★★★★★ 2 Abreviews 43 References 画像数 14

製品の概要

製品名	Anti-Peroxiredoxin 2/PRP antibody [EPR5154]
製品の詳細	Rabbit monoclonal [EPR5154] to Peroxiredoxin 2/PRP
由来種	Rabbit
アプリケーション	**適用あり:** Flow Cyt (Intra), WB, IHC-P, ICC/IF
種交差性	**交差種:** Mouse, Rat, Human **交差が予測される動物種:** Pig
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HAP1, HEK-293T, HeLa, LnCaP, and SH-SY5Y cell lysates; Mouse and rat brain tissues. IHC-P: Human endometrial carcinoma, prostatic hyperplasia and stomach tissues. ICC: HeLa cells. Flow Cyt (intra): HeLa cells.
特記事項	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**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 50% Glycerol (glycerin, glycerine), 49% PBS, 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル

クローン名	EPR5154
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab109367の使用に適用されます

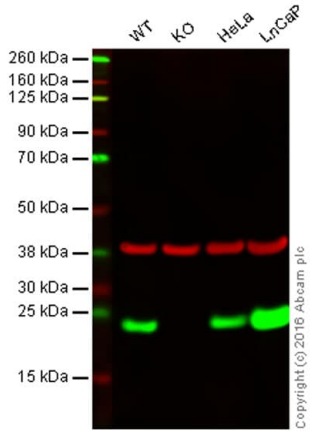
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/200 - 1/1000. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 22 kDa.
IHC-P		1/500 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	1/100 - 1/500.

ターゲット情報

機能	Involved in redox regulation of the cell. Reduces peroxides with reducing equivalents provided through the thioredoxin system. It is not able to receive electrons from glutaredoxin. May play an important role in eliminating peroxides generated during metabolism. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H(2)O(2).
配列類似性	Belongs to the ahpC/TSA family. Contains 1 thioredoxin domain.
細胞内局在	Cytoplasm.

画像

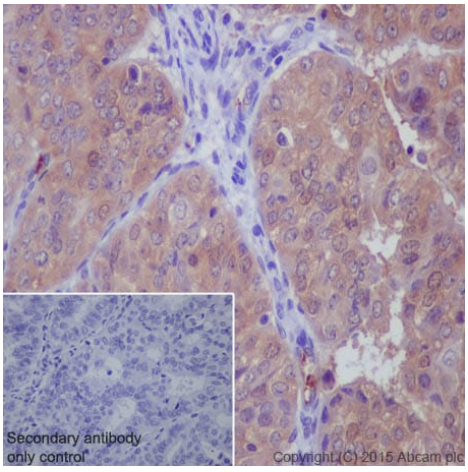


Western blot - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: Peroxiredoxin 2/PRP knockout HAP1 cell lysate (20 µg)
Lane 3: HeLa cell lysate (20 µg)
Lane 4: LnCaP cell lysate (20 µg)

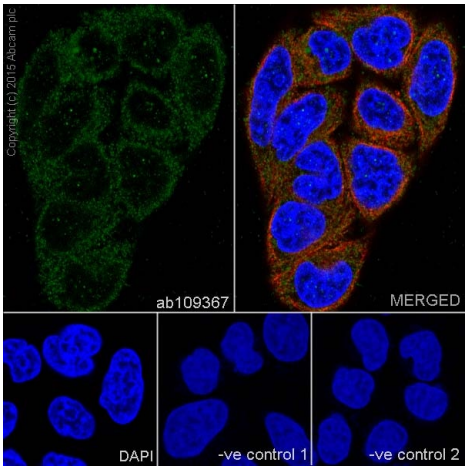
Lanes 1 - 4: Merged signal (red and green). Green - ab109367 observed at 24 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab109367 was shown to specifically react with Peroxiredoxin 2/PRP when Peroxiredoxin 2/PRP knockout samples were used. Wild-type and Peroxiredoxin 2 knockout samples were subjected to SDS-PAGE. ab109367 and **ab8245** (loading control to GAPDH) were both diluted 1/1000 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 h at room temperature before imaging.



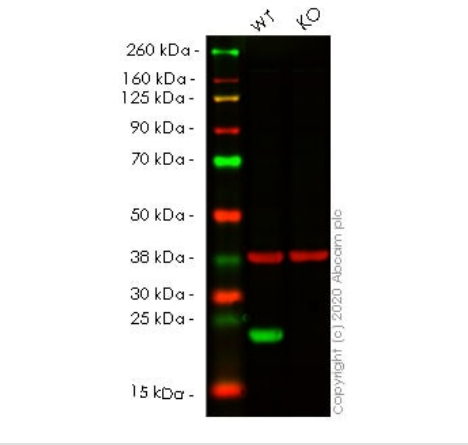
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

Immunohistochemical staining of paraffin embedded human endometrial carcinoma with purified ab109367 at a working dilution of 1/500. The secondary antibody used is **ab97051**, a goat anti-rabbit IgG (H&L) at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Immunocytochemistry/ Immunofluorescence - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

Immunofluorescence staining of HeLa cells with purified ab109367 at a working dilution of 1/100, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit (**ab150077**), used at a dilution of 1/1000. **ab7291**, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with **ab150120** (Alexa Fluor® 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 100% methanol and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified ab109367 was used at a dilution of 1/500 followed by an Alexa Fluor® 594 goat anti-mouse antibody (**ab150120**) at a dilution of 1/500. For negative control 2, **ab7291** (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor® 488 goat anti-rabbit antibody (**ab150077**) at a dilution of 1/400.



Western blot - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

All lanes : Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T cell lysate
Lane 2 : PRDX2 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

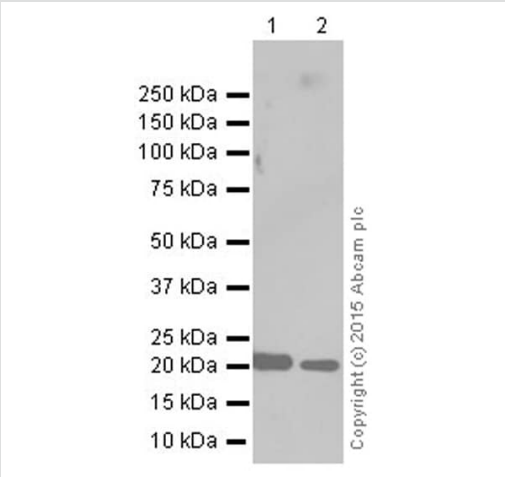
Performed under reducing conditions.

Predicted band size: 22 kDa
Observed band size: 22 kDa

Lanes 1- 2: Merged signal (red and green). Green - ab109367 observed at 22 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) observed at 37 kDa.

ab109367 was shown to react with Peroxiredoxin 2/PRP in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line **ab266392** (knockout cell lysate **ab257041**) was used. Wild-type HEK-293T and PRDX2 knockout HEK-293T cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab109367 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) overnight at 4°C at a 1 in 1000 dilution and a 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.



Western blot - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

All lanes : Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367) at 1/10000 dilution (purified)

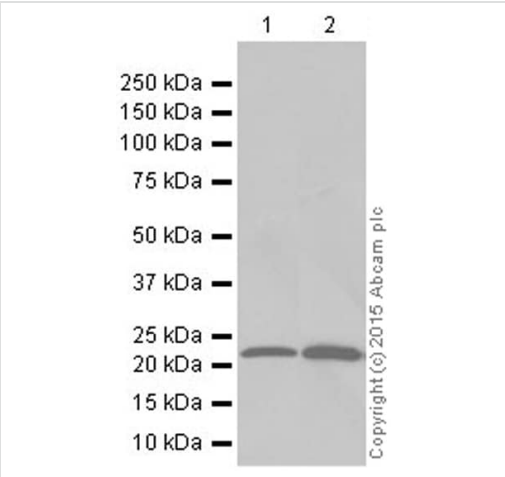
Lane 1 : Mouse brain lysate
Lane 2 : Rat brain lysate

Lysates/proteins at 10 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: 22 kDa

Blocking buffer: 5% NFDM/TBST
Dilution buffer: 5% NFDM/TBST



Western blot - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

All lanes : Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367) at 1/10000 dilution (purified)

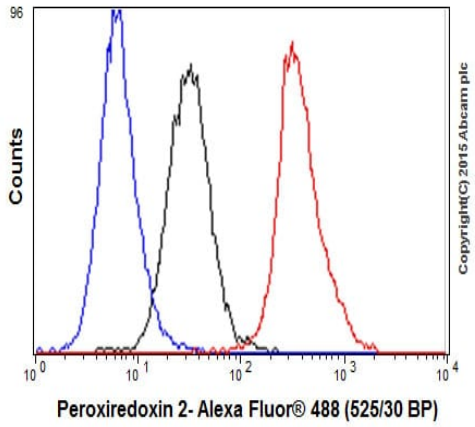
Lane 1 : HEK293 whole cell lysate
Lane 2 : LNCaP whole cell lysate

Lysates/proteins at 10 µg per lane.

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

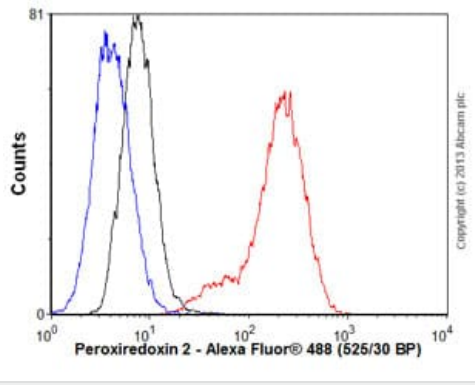
Predicted band size: 22 kDa
Observed band size: 22 kDa

Blocking buffer: 5% NFDM/TBST
Dilution buffer: 5% NFDM/TBST



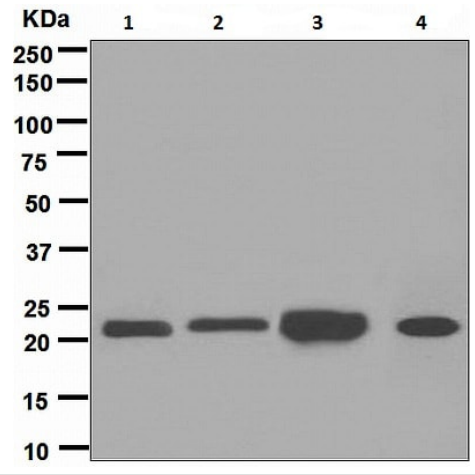
Flow Cytometry (Intracellular) - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

Overlay histogram showing HeLa cells fixed in 80% methanol and stained with purified ab109367 at a dilution of 1/200 (red line). The secondary antibody used was Alexa Fluorr® 488 goat anti-rabbit at a dilution of 1/500. Rabbit monoclonal IgG was used as an isotype control (black line) and cells incubated in the absence of both primary and secondary antibody were used as a negative control (blue line).



Flow Cytometry (Intracellular) - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

Overlay histogram showing HeLa cells stained with unpurifiedab109367 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab109367, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Western blot - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

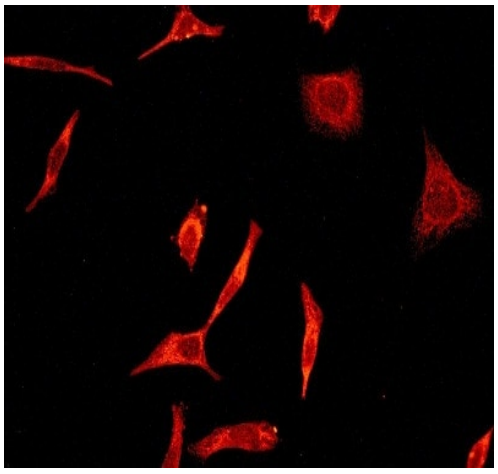
All lanes : Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367) at 1/1000 dilution (Unpurified)

Lane 1 : 293T cell lysate
Lane 2 : HeLa cell lysate
Lane 3 : LnCaP cell lysate
Lane 4 : SH-SYSY cell lysate

Lysates/proteins at 10 µg per lane.

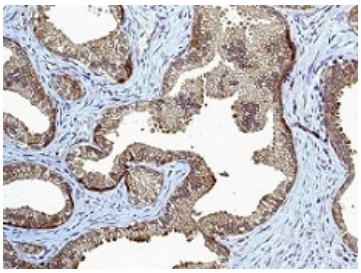
Secondary
All lanes : HRP labelled Goat anti-Rabbit at 1/2000 dilution

Predicted band size: 22 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

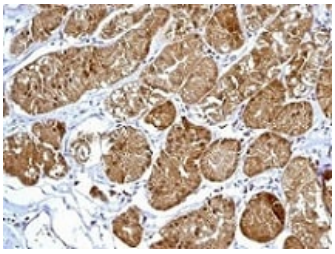
Immunofluorescent staining of Peroxiredoxin 2/PRP in HeLa cells using unpurified ab109367 at 1/250 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

Immunohistochemical analysis of Peroxiredoxin 2/PRP in paraffin-embedded Human prostatic hyperplasia tissue using unpurified ab109367 at 1/1000 dilution.

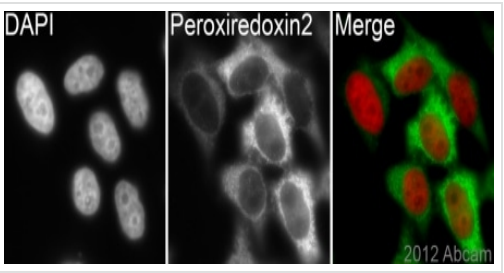
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

Immunohistochemical analysis of Peroxiredoxin 2/PRP in paraffin-embedded Human stomach tissue using unpurified ab109367 at 1/1000 dilution.

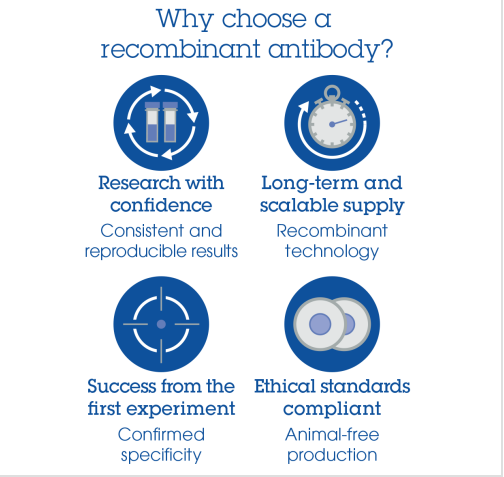
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

Image courtesy of an Abreview submitted by Dr. Kirk McManus, Univ. of Manitoba/Cancer Care MICB, Canada

Unpurified ab109367 (1/500) staining Peroxiredoxin 2/PRP in asynchronous HeLa cells (green). Cells were fixed in methanol and counterstained with DAPI in order to highlight the nucleus (red). For further experimental details please refer to Abreview.



Anti-Peroxiredoxin 2/PRP antibody [EPR5154] (ab109367)

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