


### Anti-Peroxiredoxin 1/PAG antibody ab41906

KO 評価済

★★★★★ 5 Abreviews 36 References 画像数 5

#### 製品の概要

製品名	Anti-Peroxiredoxin 1/PAG antibody
製品の詳細	Rabbit polyclonal to Peroxiredoxin 1/PAG
由来種	Rabbit
アプリケーション	適用あり: IHC-P, WB
種交差性	交差種: Human 交差が予測される動物種: Mouse, Rat, Rabbit, Cow 
免疫原	Synthetic peptide corresponding to Human Peroxiredoxin 1/PAG aa 100 to the C-terminus conjugated to keyhole limpet haemocyanin. (Peptide available as <a href="#">ab41919</a> , <a href="#">ab41920</a> )
ポジティブ・コントロール	WB: U-2 OS, HAP1, A-431 and Jurkat cell lysates.
特記事項	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, customer reviews and Q&amp;As</p>

#### 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 or -80°C. Avoid freeze / thaw cycle.
バッファー	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.

精製度	Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

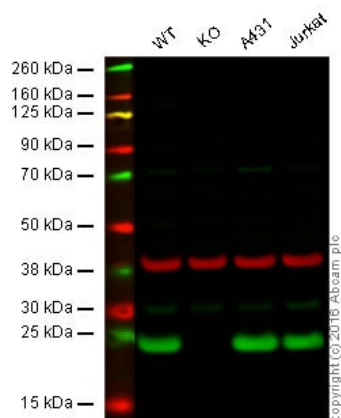
The Abpromise guarantee      **Abpromise保証は、次のテスト済みアプリケーションにおけるab41906の使用に適用されます**  
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご確認ください。

アプリケーション	Abreviews	特記事項
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB	★★★★★ (3)	Use a concentration of 1 µg/ml. Detects a band of approximately 24 kDa (predicted molecular weight: 22 kDa).

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 but not 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). Reduces an intramolecular disulfide bond in GDPD5 that gates the ability to GDPD5 to drive postmitotic motor neuron differentiation.
配列類似性	Belongs to the ahpC/TSA family. Contains 1 thioredoxin domain.
翻訳後修飾	Phosphorylated on Thr-90 during the M-phase, which leads to a more than 80% decrease in enzymatic activity.
細胞内局在	Cytoplasm. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

画像



Western blot - Anti-Peroxiredoxin 1/PAG antibody (ab41906)

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

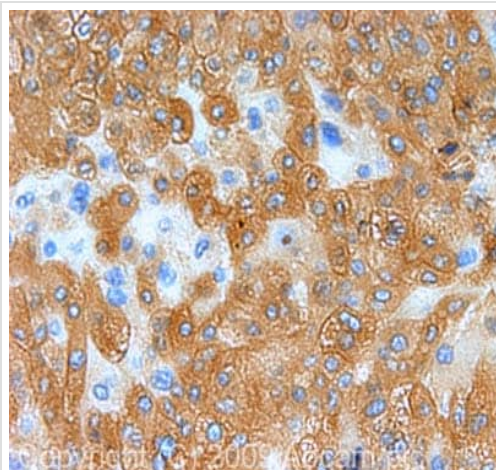
**Lane 2:** Peroxiredoxin 1/PAG knockout HAP1 cell lysate (20 µg)

**Lane 3:** A431 cell lysate (20 µg)

**Lane 4:** Jurkat cell lysate (20 µg)

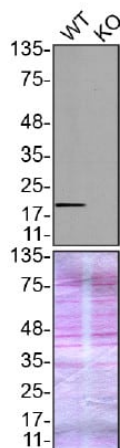
**Lanes 1 - 4:** Merged signal (red and green). Green - ab41906 observed at 23 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab41906 was shown to recognize Peroxiredoxin 1/PAG when Peroxiredoxin 1/PAG knockout samples were used, along with additional cross-reactive bands. Wild-type and Peroxiredoxin 1/PAG knockout samples were subjected to SDS-PAGE. ab41906 and **ab8245** (loading control to GAPDH) at a concentration of 1 µg/ml and diluted to 1/10000 respectively were 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 1/10000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Peroxiredoxin 1/PAG antibody (ab41906)

IHC image of Peroxiredoxin 1/PAG staining in human liver carcinoma FFPE section, performed on a 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 ab41906, 1 µg/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.



Western blot - Anti-Peroxiredoxin 1/PAG antibody (ab41906)

**All lanes :** Anti-Peroxiredoxin 1/PAG antibody (ab41906) at 1/1000 dilution

**Lane 1 :** Wild-type U-2 OS cell lysate

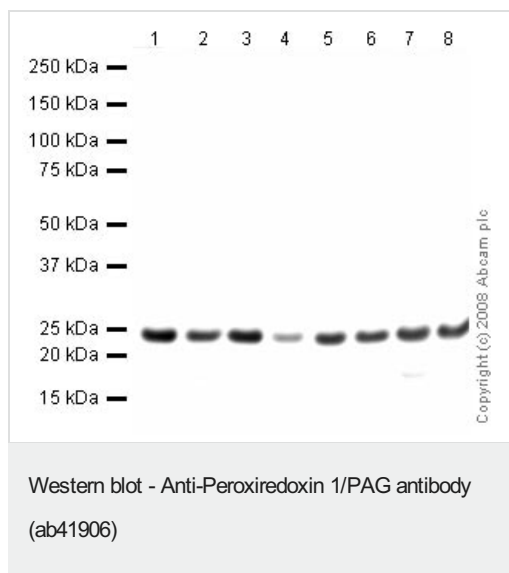
**Lane 2 :** PRDX1 knockout U-2 OS cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 22 kDa

ab41906 was shown to react with PRDX1 in wild-type U-2 OS cells in Western blot with loss of signal observed in a PRDX1 knockout cell line. Wild-type U-2 OS and PRDX1 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 5% milk in TBST for 1 hr before incubation with ab41906 overnight at 4 °C at a 1/1000 dilution. Blots were incubated with goat anti-rabbit HRP secondary antibodies at 0.2µg/mL before imaging. This data was kindly provided by the YCharOS Inc., an open science company with the mission of characterizing every commercially available antibody reagent. Abcam are working with YCharOS to support their mission of antibody characterisation using knockout cell lines.



**All lanes :** Anti-Peroxiredoxin 1/PAG antibody (ab41906) at 1 µg/ml

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 2 :** Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

**Lane 3 :** A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 4 :** HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

**Lane 5 :** HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

**Lane 6 :** MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate

**Lane 7 :** SHSY-5Y (Human neuroblastoma cell line) Whole Cell Lysate

**Lane 8 :** U2OS (Human osteosarcoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

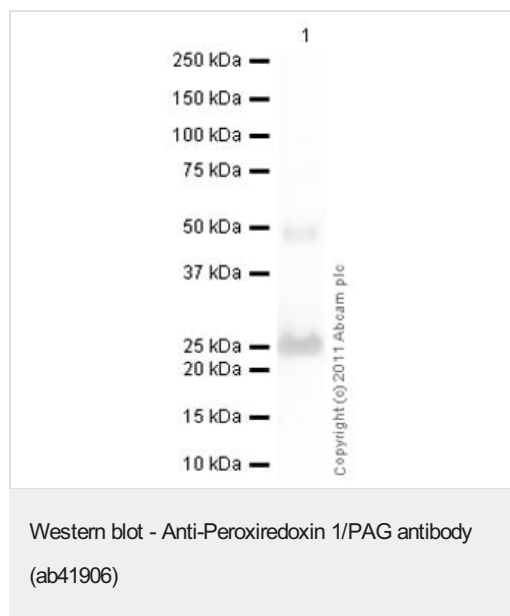
### Secondary

**All lanes :** Goat Polyclonal to rabbit IgG - H&L - Pre adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

**Predicted band size:** 22 kDa

**Observed band size:** 24 kDa



Anti-Peroxiredoxin 1/PAG antibody (ab41906) at 1 µg/ml +  
Recombinant human Peroxiredoxin 1/PAG protein (**ab79945**) at  
0.01 µg

### Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at  
1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 22 kDa

**Exposure time:** 30 seconds

This protein is a homodimer consisting of two subunits with an  
expected molecular weight of 23kDa.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors