


Anti-Glutathione Peroxidase 1 antibody ab22604

KO 評価済

★★★★★ [23 Abreviews](#) [139 References](#) [画像数 5](#)

製品の概要

製品名	Anti-Glutathione Peroxidase 1 antibody
製品の詳細	Rabbit polyclonal to Glutathione Peroxidase 1
由来種	Rabbit
特異性	Replenishment batches of our polyclonal antibody, ab22604 are tested in WB. Previous batches were additionally validated in ICC/IF. This application is still expected to work and is covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody, ab108427 .
アプリケーション	適用あり: WB, ICC/IF
種交差性	交差種: Mouse, Rat, Human 交差が予測される動物種: Cow 
免疫原	Synthetic peptide within Human Glutathione Peroxidase 1 aa 150 to the C-terminus conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. Database link: P07203
ポジティブ・コントロール	ICC/IF: HepG2 cells. WB: Wild-type HAP1 cell lysate. Human, mouse and rat liver tissue lysate.
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&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ab22604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
WB	★★★★☆ (11)	Use a concentration of 1 µg/ml. Detects a band of approximately 22 kDa (predicted molecular weight: 22 kDa).
ICC/IF	★★★★★ (1)	Use a concentration of 5 µg/ml.

ターゲット情報

機能

Protects the hemoglobin in erythrocytes from oxidative breakdown.

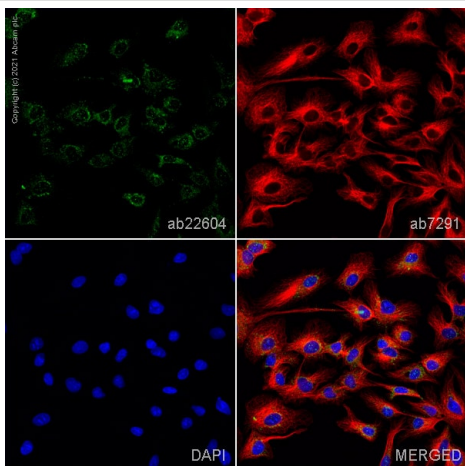
配列類似性

Belongs to the glutathione peroxidase family.

細胞内局在

Cytoplasm.

画像

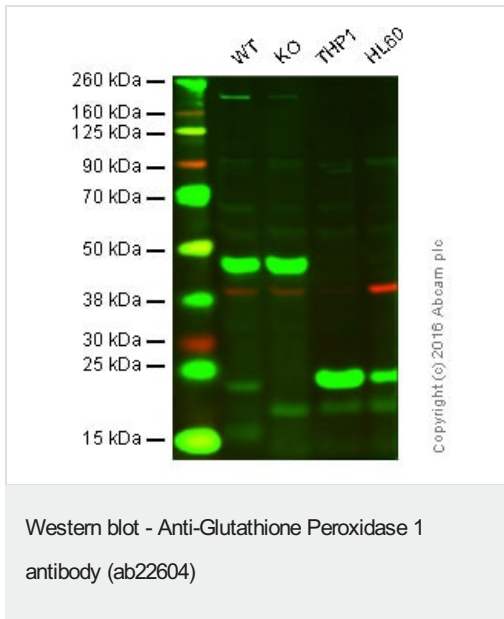


Immunocytochemistry/ Immunofluorescence - Anti-Glutathione Peroxidase 1 antibody (ab22604)

ab22604 staining Glutathione Peroxidase 1 in HepG2 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab22604 at 5µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS,

Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



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

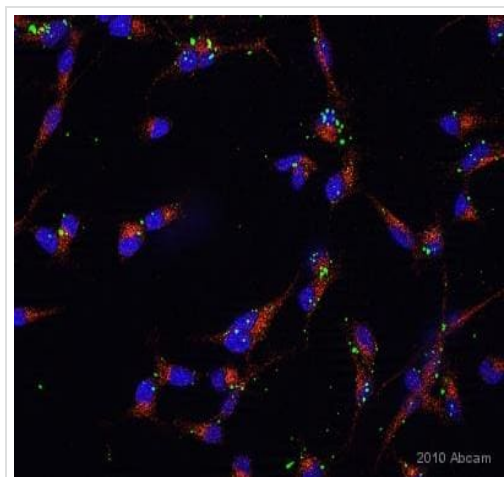
Lane 2: GPX1 knockout HAP1 cell lysate (20 µg)

Lane 3: THP1 cell lysate (20 µg)

Lane 4: HL60 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab22604 observed at 24 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab22604 was shown to recognize Glutathione Peroxidase 1 in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when Glutathione Peroxidase 1 knockout samples were examined. Wild-type and Glutathione Peroxidase 1 knockout samples were subjected to SDS-PAGE. ab22604 at a concentration of 1 µg/ml and **ab8245** (loading control to GAPDH) diluted at 1/2000 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 1/10,000 dilution for 1 hour at room temperature before imaging.

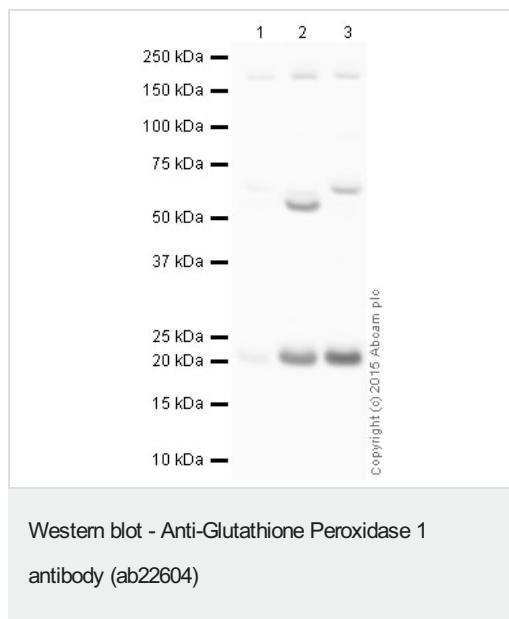


Immunocytochemistry/ Immunofluorescence - Anti-Glutathione Peroxidase 1 antibody (ab22604)

This image is courtesy of an Abreview submitted by Carl Hobbs

ab22604 staining mouse Cor-1 cells by ICC/IF

(Immunocytochemistry/immunofluorescence). Cells were fixed with formaldehyde, permeabilized with TBS/BSA/azide/0.1% Tween 20 and blocked with 1% BSA for 10 minutes at RT. Samples were incubated with primary antibody (1/300) for 2 hours. A diluted (1/1000) Alexa Fluor® 594-conjugated Goat anti-rabbit IgG polyclonal was used as the secondary antibody.



All lanes : Anti-Glutathione Peroxidase 1 antibody (ab22604) at 1 µg/ml (Blocked with 3% Milk)

Lane 1 : Liver (Human) Tissue Lysate

Lane 2 : Liver (Mouse) Tissue Lysate

Lane 3 : Liver (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

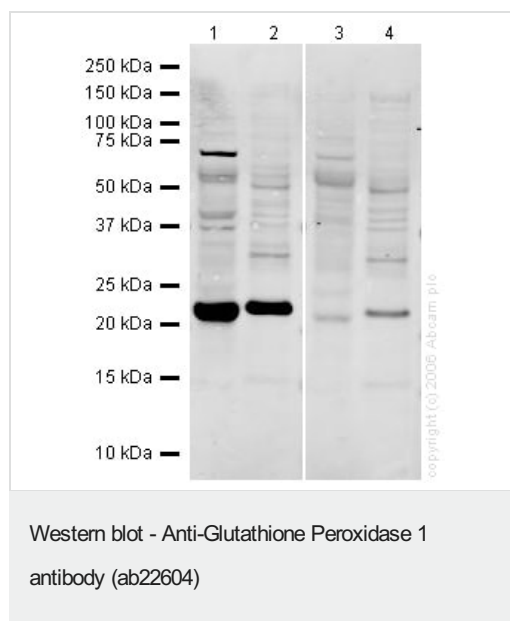
Predicted band size: 22 kDa

Observed band size: 22 kDa

Additional bands at: 190 kDa, 55 kDa, 65 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 4 minutes

This blot was produced using a 4-12% Bis-tris gel under the MES buffer system. The gel was run at 200V for 35 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab22604 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution [ab133406](#).



All lanes : Anti-Glutathione Peroxidase 1 antibody (ab22604) at 1 µg/ml

Lane 1 : Human liver normal tissue lysate

Lane 2 : Liver (Mouse) Tissue Lysate ([ab7935](#))

Lane 3 : Human liver normal tissue lysate with Human Glutathione Peroxidase 1 peptide ([ab25301](#)) at 1 µg/ml

Lane 4 : Liver (Mouse) Tissue Lysate ([ab7935](#)) with Human Glutathione Peroxidase 1 peptide ([ab25301](#)) at 1 µg/ml

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit IgG at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 22 kDa

Observed band size: 22,24 kDa

ab22604 detects a band of approximately 22 kDa in human liver lysate. The band detected in the mouse liver lysate runs slightly higher (~ 24kDa). We believe that these bands correspond to Glutathione Peroxidase 1 as they are both blocked by the addition of the immunizing peptide ([ab25301](#)).

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