


Anti-Glutathione Peroxidase 1 antibody ab22604

敲除验证

★★★★★ [23 Abreviews](#) [139 References](#) [5 图像](#)

概述

产品名称	Anti-Glutathione Peroxidase 1 抗体
描述	兔多克隆抗体 to Glutathione Peroxidase 1
宿主	Rabbit
特异性	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 .
经测试应用	适用于: WB, ICC/IF
种属反应性	与反应: Mouse, Rat, Human 预测可用于: 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
阳性对照	ICC/IF: HepG2 cells. WB: Wild-type HAP1 cell lysate. Human, mouse and rat liver tissue lysate.
常规说明	<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>

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 or -80°C. Avoid freeze / thaw cycle.
存储溶液	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.

纯度 Immunogen affinity purified
克隆 多克隆
同种型 IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab22604于以下的经测试应用

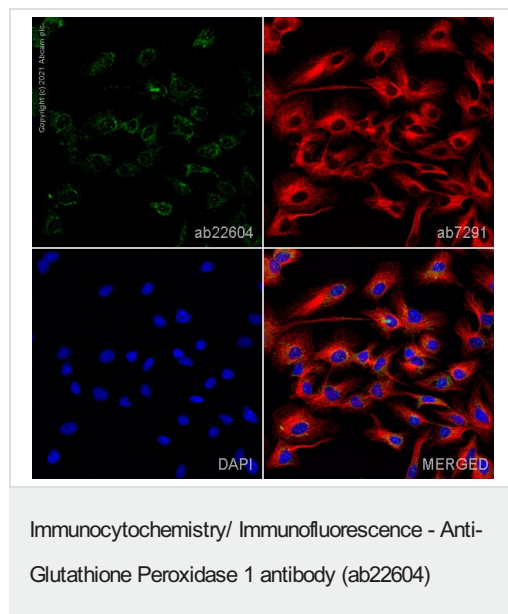
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (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.

靶标

功能 Protects the hemoglobin in erythrocytes from oxidative breakdown.
序列相似性 Belongs to the glutathione peroxidase family.
细胞定位 Cytoplasm.

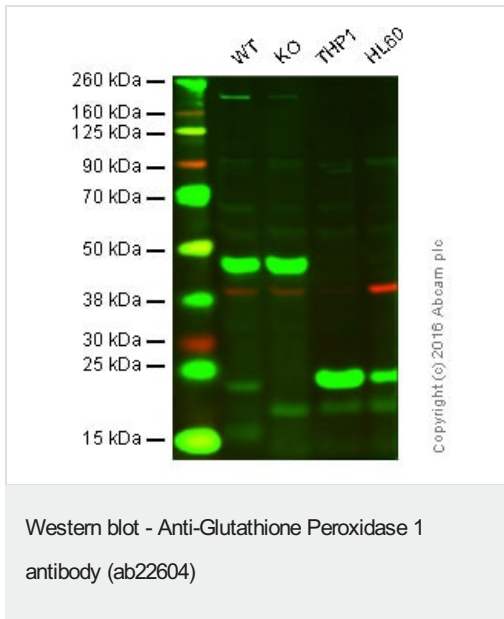
图片



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)

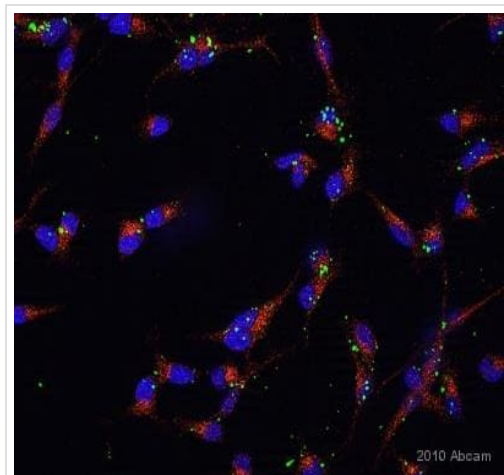
Lane 2: GPX1 knockout HAP1 cell lysate (20 µg)

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.

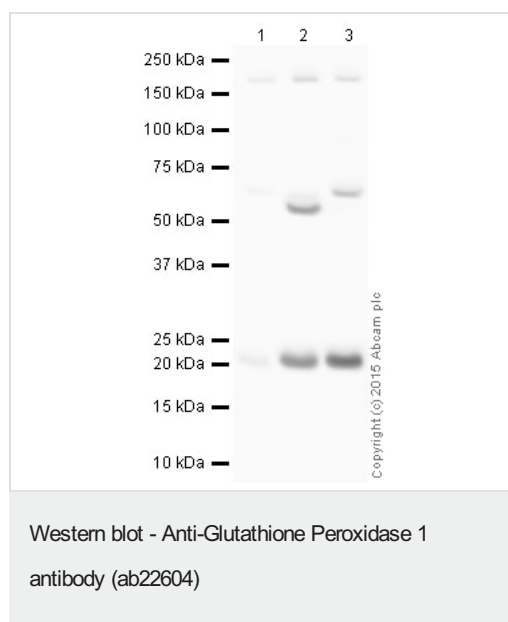


Immunocytochemistry/ Immunofluorescence - Anti-Glutathione Peroxidase 1 antibody (ab22604)

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.

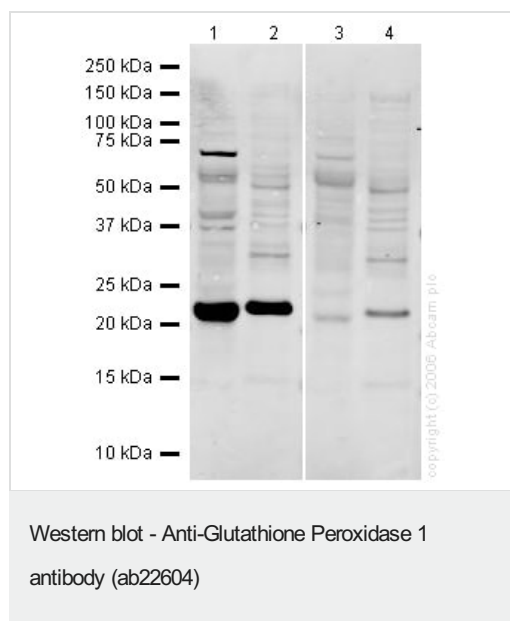
Predicted band size: 22 kDa

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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