abcam

Product datasheet

Anti-Glutathione Peroxidase 1 antibody [EPR3311] ab108429

敲除验证 重组 RabMAb

2 Abreviews 11 References 6 图像

概述

产品名称	Anti-Glutathione Peroxidase 1抗体[EPR3311]
描述	兔单克隆抗体[EPR3311] to Glutathione Peroxidase 1
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), WB, IHC-P **不适用于:** ICC/IF
种属反应性	**与反应:** Human **预测可用于:** Rat
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	Human fetal liver, SH SY5Y, and THP1 cell lysates; Human breast carcinoma tissue. WB: HEK-293T cell lysate.
常规说明	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**. Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant

纯度	Tissue culture supernatant
克隆	单克隆
克隆编号	EPR3311
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab108429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。

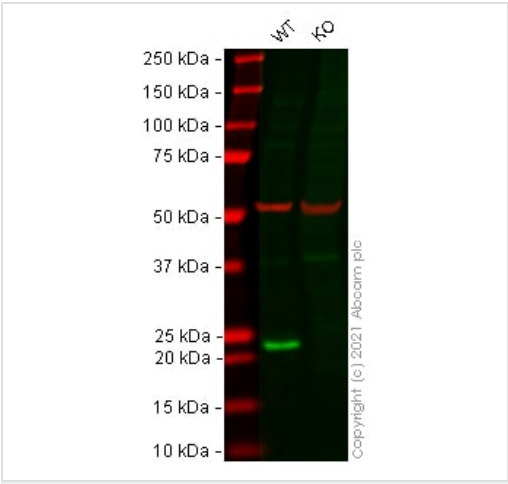
应用	Ab评论	说明
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB	★★★★☆ (1)	1/1000 - 1/10000. Detects a band of approximately 22 kDa (predicted molecular weight: 22 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.

应用说明 Is unsuitable for ICC/IF.

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



Western blot - Anti-Glutathione Peroxidase 1 antibody [EPR3311] (ab108429)

All lanes : Anti-Glutathione Peroxidase 1 antibody [EPR3311] (ab108429) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T cell lysate

Lane 2 : GPX1 knockout HEK-293T cell lysate

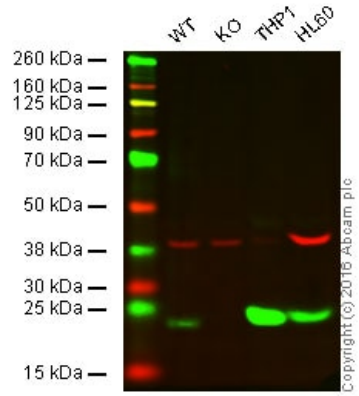
Performed under reducing conditions.

Predicted band size: 22 kDa

Observed band size: 22 kDa

False colour image of Western blot: Anti-Glutathione Peroxidase 1

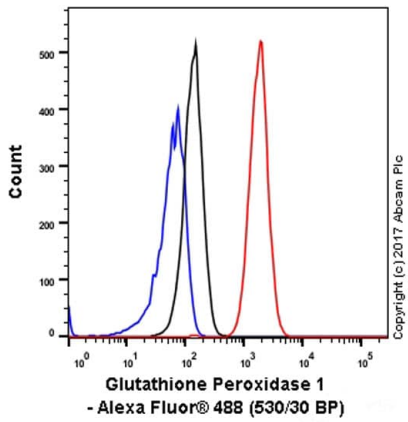
antibody [EPR3311] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (**ab7291**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab108429 was shown to bind specifically to Glutathione Peroxidase 1. A band was observed at 22 kDa in wild-type HEK-293T cell lysates with no signal observed at this size in GPX1 knockout cell line **ab266650** (knockout cell lysate **ab256932**). To generate this image, wild-type and GPX1 knockout HEK-293T cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged.Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



Western blot - Anti-Glutathione Peroxidase 1 antibody [EPR3311] (ab108429)

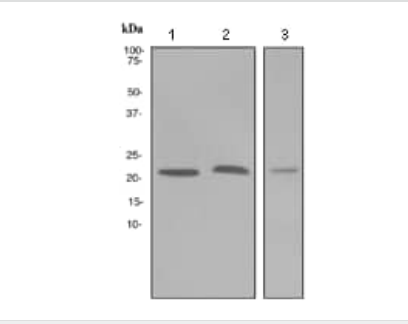
Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: GPX1 knockout HAP1 cell lysate (20 µg)
Lane 3: THP1 cell lysate (20 µg)
Lane 4: HL60 cell lysate (20 µg)
Lanes 1 and 2: Merged signal (red and green). Green - ab108429, observed at 22 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab108429 was shown to specifically react with Glutathione Peroxidase 1 in wild-type HAP1 cells. 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. ab108429 and **ab8245** (loading control to GAPDH) were diluted 1/1000 and 1/2000 respectively 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 hour at room temperature before imaging.



Flow Cytometry (Intracellular) - Anti-Glutathione Peroxidase 1 antibody [EPR3311] (ab108429)

Intracellular Flow Cytometry analysis of THP-1 (human acute monocytic leukemia) cells labeling Glutathione Peroxidase 1 with purified ab108429 at 1/250 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (**ab150077**) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) (**ab172730**) was used as the isotype control, Cell without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



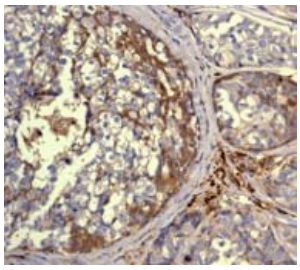
Western blot - Anti-Glutathione Peroxidase 1 antibody [EPR3311] (ab108429)

All lanes : Anti-Glutathione Peroxidase 1 antibody [EPR3311] (ab108429) at 1/1000 dilution

Lane 1 : Human fetal liver lysate
Lane 2 : SH SY5Y cell lysate
Lane 3 : THP1 cell lysate

Lysates/proteins at 10 µg per lane.

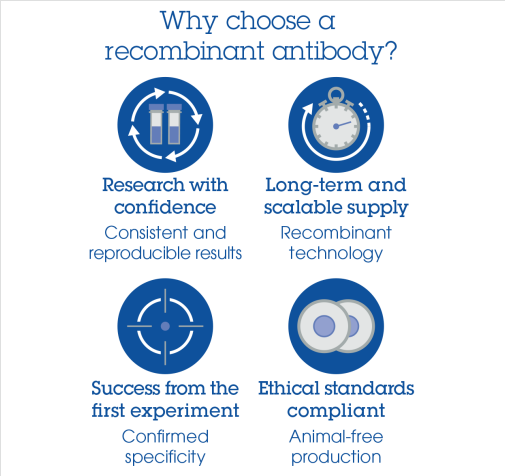
Predicted band size: 22 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glutathione Peroxidase 1 antibody [EPR3311] (ab108429)

ab108429, at 1/100 dilution, staining Glutathione Peroxidase 1 in paraffin-embedded Human breast carcinoma tissue by Immunohistochemistry.

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



Anti-Glutathione Peroxidase 1 antibody [EPR3311]

(ab108429)

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.cn/abpromise** or contact our technical team.

Terms and conditions

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