# abcam

## Product datasheet

## Anti-Glutathione Peroxidase 1 antibody [EPR3311] ab108429



יעלטעבע RabMAb

★★★★★ 2 Abreviews 11 References 画像数 6

#### 製品の概要

製品名 Anti-Glutathione Peroxidase 1 antibody [EPR3311]

製品の詳細 Rabbit monoclonal [EPR3311] to Glutathione Peroxidase 1

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), WB, IHC-P

適用なし: ICC/IF

交差種: Human 種交差性

交差が予測される動物種: Rat 4

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 Human fetal liver, SH SY5Y, and THP1 cell lysates; Human breast carcinoma tissue. WB: HEK-

293T cell lysate.

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**.

Mouse: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

バッファー pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

1

精製度 Tissue culture supernatant

**ポリ/モノ** モノクローナル

**クローン名** EPR3311

アイソタイプ IgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab108429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)		Use at an assay dependent concentration.
WB	<b>★★★★☆ (1)</b>	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.

追加情報 Is unsuitable for ICC/IF.

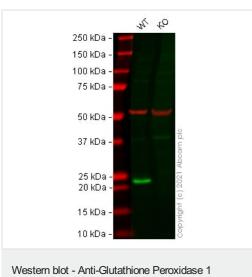
### ターゲット情報

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



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

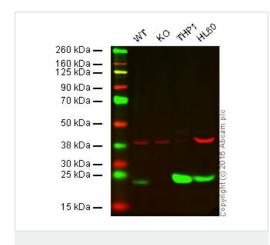
Lane 2: GPX1 knockout HEK-293T cell lysate

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<sup>®</sup> 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 lgG 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)

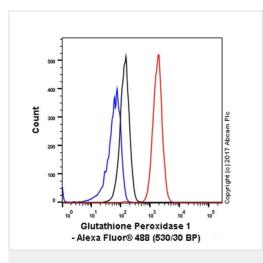
Lane 2: GPX1 knockout HAP1 cell lysate (20 µg)

Lane 3: THP1 cell lysate (20 µg)

Lane 4: HL60 cell lysate (20 µg)

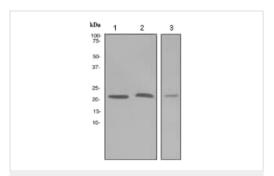
**Lanes 1 and 2:** Merged signal (red and green). Green - ab108429, observed at 22 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

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. Wildtype 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 antiRabbit 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 lgG (Alexa Fluorr® 488) (ab150077) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal lgG (Black) (ab172730) was used as the isotype control, Cell without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



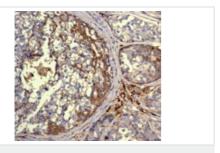
Western blot - Anti-Glutathione Peroxidase 1 antibody [EPR3311] (ab108429)

**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.

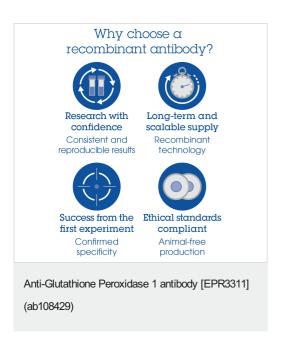
Predicted band size: 22 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded 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.



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