abcam

Product datasheet

Anti-Catalase antibody - Peroxisome Marker ab52477



★★★★★ 8 Abreviews 36 References 画像数 6

製品の概要

製品名 Anti-Catalase antibody - Peroxisome Marker

製品の詳細 Rabbit polyclonal to Catalase - Peroxisome Marker

由来種 Rabbit

特異性 This antibody reacts with Catalase.

Replenishment batches of our polyclonal antibody, ab52477 are tested in WB. Previous batches were additionally validated in ICC, IHC-P and IP. These applications are still expected to work and are covered by our Abpromise guarantee. You may also be interested in our alternative

recombinant antibody, ab76110.

アプリケーション 適用あり: IP, ICC, WB, IHC-P

適用なし: Flow Cyt

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide corresponding to Human Catalase aa 50-150 (N terminal).

(Peptide available as ab215573)

ポジティブ・コントロール WB: TF1, Rat liver tissue, WT HAP1, HeLa, Jurkat, U251, U2OS, 9L, PC12 and RIE-1 whole cell

lysates. IHC-P: Human liver tissue section.

特記事項

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.

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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

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Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified 特記事項(精製) Affinity purified ポリケローナル

アイソタイプ lgG

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ab52477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
IP		Use at an assay dependent concentration.
ICC		Use at an assay dependent concentration.
WB	****(8)	1/1000. Detects a band of approximately 60 kDa (predicted molecular weight: 60 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

追加情報 Is unsuitable for Flow Cyt.

ターゲット情報

機能
Occurs in almost all aerobically respiring organisms and serves to protect cells from the toxic
effects of hydrogen peroxide. Promotes growth of cells including T-cells, B-cells, myeloid
leukemia cells, melanoma cells, mastocytoma cells and normal and transformed fibroblast cells.

関連疾患 Defects in CAT are the cause of acatalasia (ACATLAS) [MIM:115500]; also known as

acatalasemia. This disease is characterized by absence of catalase activity in red cells and is

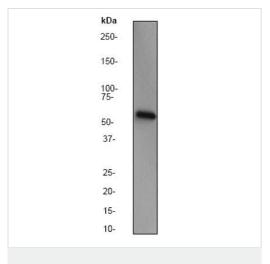
often associated with ulcerating oral lesions.

配列類似性 Belongs to the catalase family.

翻訳後修飾 The N-terminus is blocked.

細胞内局在 Peroxisome.

画像



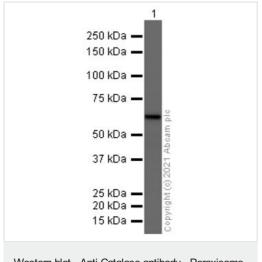
Western blot - Anti-Catalase antibody - Peroxisome Marker (ab52477)

Anti-Catalase antibody - Peroxisome Marker (ab52477) at 1/1000 dilution + TF1 lysate at 10 μg

Secondary

Goat anti-rabbit HRP labeled at 1/2000 dilution

Predicted band size: 60 kDa Observed band size: 60 kDa



Western blot - Anti-Catalase antibody - Peroxisome Marker (ab52477)

Anti-Catalase antibody - Peroxisome Marker (ab52477) at 1 μ g/ml + Rat liver tissue lysate at 10 μ g

Secondary

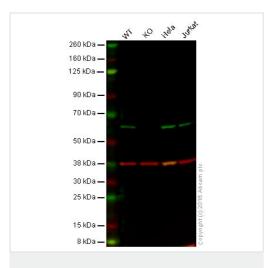
Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/50000 dilution

Predicted band size: 60 kDa **Observed band size:** 60 kDa

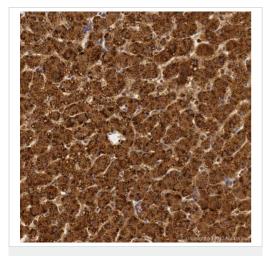
Exposure time: 30 seconds

Gel type: MOPS

Blocking buffer: 2% BSA



Western blot - Anti-Catalase antibody - Peroxisome Marker (ab52477)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Catalase antibody - Peroxisome Marker (ab52477)

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

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

Lane 3: HeLa cell lysate (20 µg)

Lane 4: Jurkat cell lysate (20 µg)

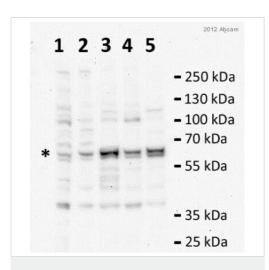
Lanes 1 - 4: Merged signal (red and green). Green - ab52477 observed at 60 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

ab52477 was shown to specifically react with Catalase when Catalase knockout samples were used. Wild-type and Catalase knockout samples were subjected to SDS-PAGE. ab52477 and ab8245 (loading control to GAPDH) were diluted at 1/1000 and 1/10,000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) andGoat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

IHC image of Catalasestaining in a formalin fixed, paraffin embedded normal human liver tissue section*, performed on a Leica 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 ab52477, 5µg/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.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Western blot - Anti-Catalase antibody - Peroxisome Marker (ab52477)

Image courtesy of an anonymous Abreview.

All lanes : Anti-Catalase antibody - Peroxisome Marker (ab52477) at 1 μg/ml

Lane 1: Whole cell lysate prepared from 293T cells
Lane 2: Whole cell lysate prepared from HeLa cells
Lane 3: Whole cell lysate prepared from U251 cells
Lane 4: Whole cell lysate prepared from Jurkat cells
Lane 5: Whole cell lysate prepared from U2OS cells

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : HRP conjugated pig anti-rabbit polyclonal at 1/5000 dilution

Developed using the ECL technique.

Predicted band size: 60 kDa **Observed band size:** 60 kDa

Exposure time: 5 minutes

All lanes : Anti-Catalase antibody - Peroxisome Marker (ab52477) at 1 µg/ml

Lane 1 : Whole cell lysate prepared from 9L cells

Lane 2 : Whole cell lysate prepared from PC12 cells

Lane 3: Whole cell lysate prepared from RIE-1 cells

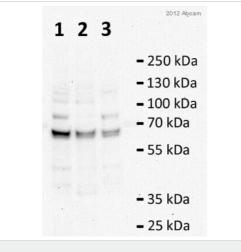
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : HRP conjugated pig anti-rabbit polyclonal at 1/5000 dilution

Developed using the ECL technique.

Predicted band size: 60 kDa **Observed band size:** 60 kDa



Western blot - Anti-Catalase antibody - Peroxisome Marker (ab52477)

Image courtesy of an anonymous Abreview.

Exposure time: 5 minutes

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