

Anti-Catalase antibody [EPR20198] - Peroxisome Marker ab209211

KO 評価済 リコンビナント RabMAb

★★★★★ [3 Abreviews](#) [19 References](#) [画像数 9](#)

製品の概要

製品名	Anti-Catalase antibody [EPR20198] - Peroxisome Marker
製品の詳細	Rabbit monoclonal [EPR20198] to Catalase - Peroxisome Marker
由来種	Rabbit
アプリケーション	適用あり: WB, ICC/IF, Flow Cyt (Intra)
種交差性	交差種: Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Mouse brain, heart, spleen and kidney lysates; rat heart and brain lysates; C6, PC-12, NIH/3T3, HepG2, 293 and C2C12 whole cell lysates; Human fetal brain, fetal heart and fetal kidney lysates. ICC/IF: C2C12 and NIH/3T3 cells. Flow Cyt (intra): C2C12 cells.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</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 long term. Avoid freeze / thaw cycle.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル

クローン名 EPR20198
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ab209211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	★★★★★ (2)	1/2000. Detects a band of approximately 60 kDa (predicted molecular weight: 60 kDa).
ICC/IF		1/100.
Flow Cyt (Intra)		1/60. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

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.

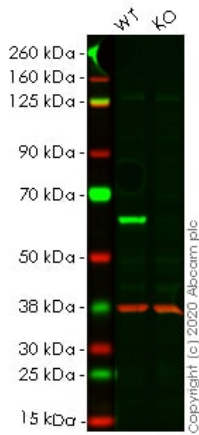
関連疾患 Defects in CAT are the cause of acatalasia (ACATLAS) [MIM:115500]; also known as acatalasemia. This disease is characterized by absence of catalase activity in red cells and is often associated with ulcerating oral lesions.

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 [EPR20198] - Peroxisome Marker (ab209211)

All lanes : Anti-Catalase antibody [EPR20198] - Peroxisome Marker (ab209211) at 1/2000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : CAT knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

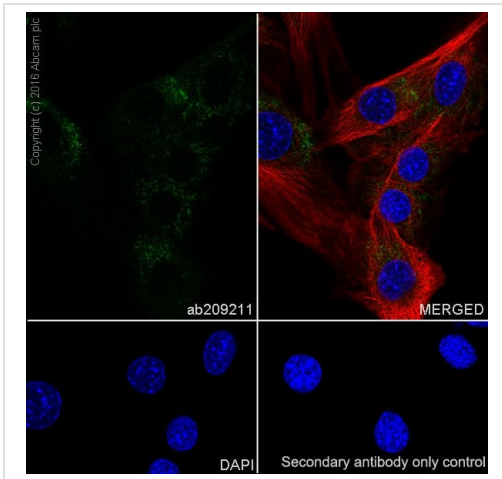
Performed under reducing conditions.

Predicted band size: 60 kDa

Observed band size: 60 kDa

Lanes 1-2: Merged signal (red and green). Green - ab209211 observed at 60 kDa. Red - loading control **ab8245** observed at 37 kDa.

ab209211 Anti-Catalase antibody [EPR20198] - Peroxisome Marker was shown to specifically react with Catalase in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab265250** (knockout cell lysate **ab256859**) was used. Wild-type and Catalase knockout samples were subjected to SDS-PAGE. ab209211 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 2000 and 1 in 20000 dilution respectively. 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 in 20000 dilution for 1 hour at room temperature before imaging.

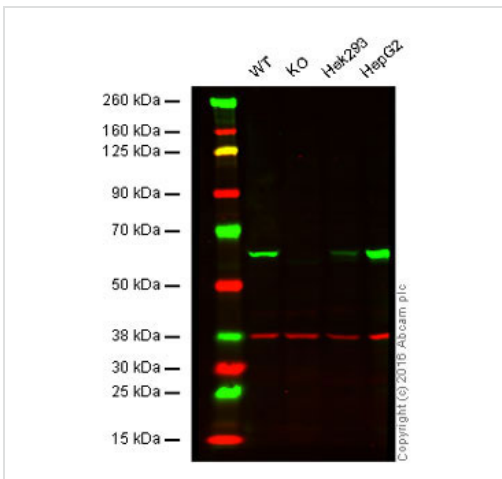


Immunocytochemistry/ Immunofluorescence - Anti-Catalase antibody [EPR20198] - Peroxisome Marker (ab209211)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized C2C12 (Mouse myoblast cell line) cells labeling Catalase with ab209211 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on C2C12 cell line. The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.



Western blot - Anti-Catalase antibody [EPR20198] - Peroxisome Marker (ab209211)

All lanes : Anti-Catalase antibody [EPR20198] - Peroxisome Marker (ab209211) at 1/2000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate

Lane 2 : CAT knockout HAP1 whole cell lysate

Lane 3 : Hek293 whole cell lysate

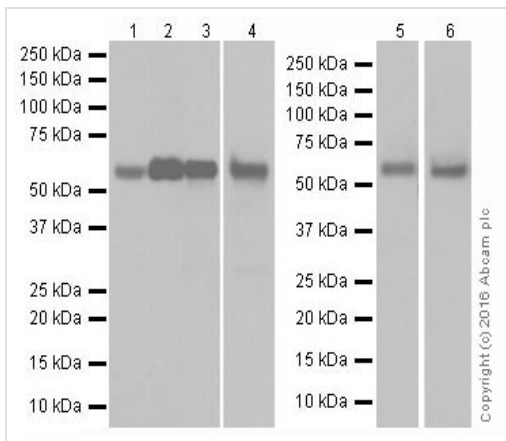
Lane 4 : HepG2 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 60 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab209211 observed at 60 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab209211 was shown to specifically react with CAT in wild-type HAP1 cells. No band was observed when CAT knockout samples were examined. Wild-type and CAT knockout samples were subjected to SDS-PAGE. Ab209211 and ab8245 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/2000 dilution and 1/10,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) ab216776 secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Catalase antibody [EPR20198] - Peroxisome Marker (ab209211)

All lanes : Anti-Catalase antibody [EPR20198] - Peroxisome

Marker (ab209211) at 1/2000 dilution

Lane 1 : Mouse brain lysate

Lane 2 : Mouse heart lysate

Lane 3 : Mouse spleen lysate

Lane 4 : Mouse kidney lysate

Lane 5 : Rat heart lysate

Lane 6 : Rat brain lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at

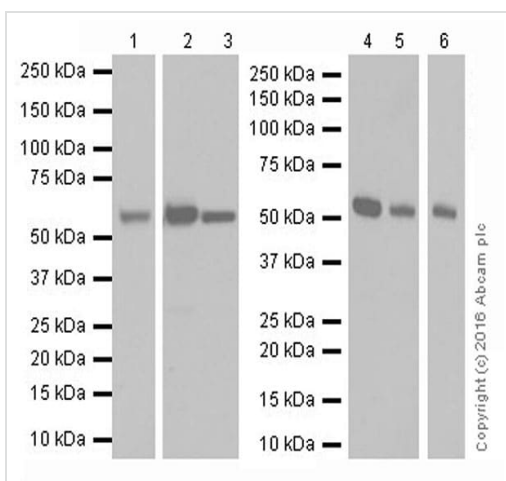
1/100000 dilution

Predicted band size: 60 kDa

Observed band size: 60 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1-3: 5 seconds; Lane 4/5: 1 second; Lane 6: 3 seconds.



Western blot - Anti-Catalase antibody [EPR20198] - Peroxisome Marker (ab209211)

All lanes : Anti-Catalase antibody [EPR20198] - Peroxisome

Marker (ab209211) at 1/2000 dilution

Lane 1 : C6 (Rat glial tumor cell line) whole cell lysate

Lane 2 : PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate

Lane 3 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

Lane 4 : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lane 5 : HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

Lane 6 : C2C12 (Mouse myoblast cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at

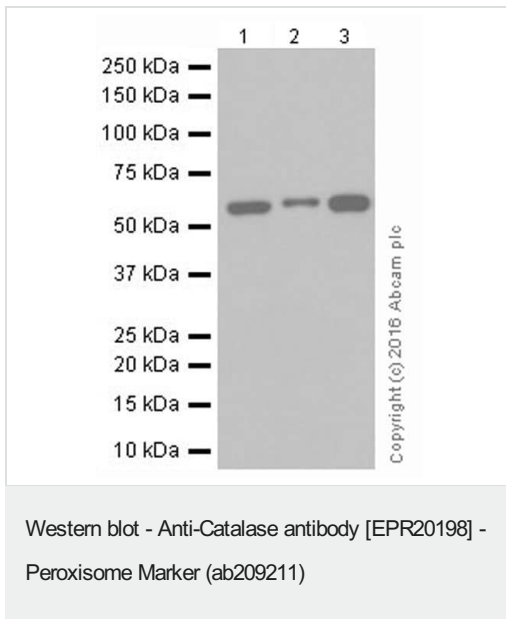
1/100000 dilution

Predicted band size: 60 kDa

Observed band size: 60 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1: 1 second; Lane 2/3/6: 3 seconds; Lane 4/5: 30 seconds.



All lanes : Anti-Catalase antibody [EPR20198] - Peroxisome Marker (ab209211) at 1/2000 dilution

Lane 1 : Human fetal brain lysate

Lane 2 : Human fetal heart lysate

Lane 3 : Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

Secondary

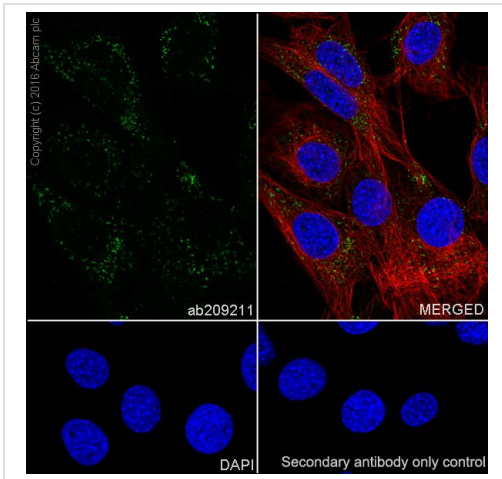
All lanes : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 60 kDa

Observed band size: 60 kDa

Exposure time: 1 minute

Blocking/Dilution buffer: 5% NFDm/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Catalase antibody [EPR20198] - Peroxisome Marker (ab209211)

ImmunoFluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (Mouse embryonic fibroblast cell line) cells labeling Catalase with ab209211 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488)

(**ab150077**) secondary antibody at 1/1000 dilution (green).

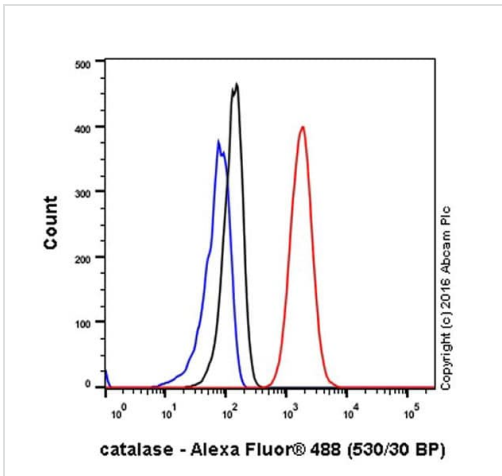
Confocal image showing cytoplasmic staining on NIH/3T3 cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] -

Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-Catalase antibody [EPR20198] - Peroxisome Marker (ab209211)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed C2C12 (Mouse myoblast cell line) cells labeling Catalase with ab209211 at 1/60 dilution (red) compared with Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat Anti-Rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Catalase antibody [EPR20198] - Peroxisome Marker (ab209211)

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