

Anti-SDHA antibody [EPR9043(B)] ab137040

KO 評価済 リコンビナント RabMAb

★★★★☆ 4 Abreviews 22 References 画像数 14

製品の概要

製品名	Anti-SDHA antibody [EPR9043(B)]
製品の詳細	Rabbit monoclonal [EPR9043(B)] to SDHA
由来種	Rabbit
アプリケーション	適用あり: WB, IP, IHC-P, ICC/IF, Flow Cyt (Intra)
種交差性	交差種: Mouse, Rat, Human
免疫原	Synthetic peptide within Human SDHA aa 550-650. The exact sequence is proprietary.
ポジティブ・コントロール	WB: Wild-type HEK-293 whole cell lysate. MCF7, HT1080, Jurkat and HepG2 whole cell lysate. Mouse brain and kidney tissue lysate. Rat brain tissue lysate. IHC-P: Human, mouse and rat brain tissue. ICC: HeLa cells. IP: Jurkat and HeLa cell lysate. Flow Cyt (intra): HeLa 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. Avoid freeze / thaw cycle.
バッファー	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 40% Glycerol, 0.05% BSA, 59% PBS</p>
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR9043(B)

アプリケーション

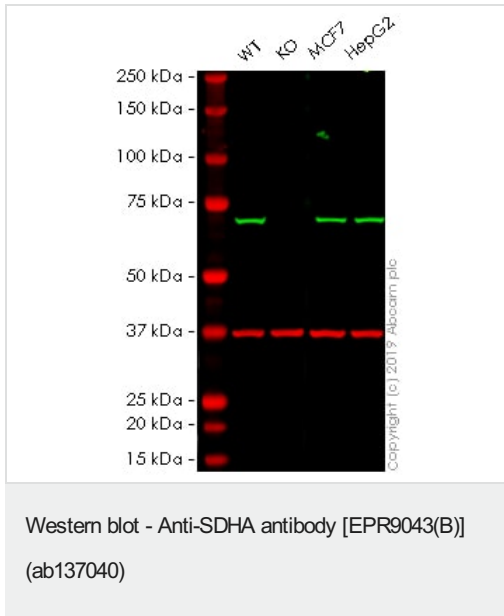
The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab137040の使用に適用されます**
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご確認ください。

アプリケーション	Abreviews	特記事項
WB	★★★★☆ (2)	1/1000 - 1/5000. Predicted molecular weight: 72 kDa. Unpurified dilution 1/1000 - 1/10000.
IP		1/10 - 1/20. Unpurified dilution 1/10 - 1/100.
IHC-P	★★★★★ (1)	1/50 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/250.
Flow Cyt (Intra)		1/10 - 1/20. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. Unpurified dilution 1/10 - 1/100.

ターゲット情報

機能	Flavoprotein (FP) subunit of succinate dehydrogenase (SDH) that is involved in complex II of the mitochondrial electron transport chain and is responsible for transferring electrons from succinate to ubiquinone (coenzyme Q).
パスウェイ	Carbohydrate metabolism; tricarboxylic acid cycle; fumarate from succinate (eukaryal route): step 1/1.
関連疾患	<p>Defects in SDHA are a cause of mitochondrial complex II deficiency (MT-C2D) [MIM:252011]. A disorder of the mitochondrial respiratory chain with heterogeneous clinical manifestations. Clinical features include psychomotor regression in infants, poor growth with lack of speech development, severe spastic quadriplegia, dystonia, progressive leukoencephalopathy, muscle weakness, exercise intolerance, cardiomyopathy. Some patients manifest Leigh syndrome or Kearns-Sayre syndrome.</p> <p>Defects in SDHA are a cause of Leigh syndrome (LS) [MIM:256000]. LS is a severe disorder characterized by bilaterally symmetrical necrotic lesions in subcortical brain regions.</p> <p>Defects in SDHA are the cause of cardiomyopathy dilated type 1GG (CMD1GG) [MIM:613642]. CMD1GG is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.</p>
配列類似性	Belongs to the FAD-dependent oxidoreductase 2 family. FRD/SDH subfamily.
細胞内局在	Mitochondrion inner membrane.

画像



All lanes : Anti-SDHA antibody [EPR9043(B)] (ab137040) at 1/1000 dilution

Lane 1 : Wild-type HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

Lane 2 : SDHA knockout HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

Lane 3 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lane 4 : Hep G2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

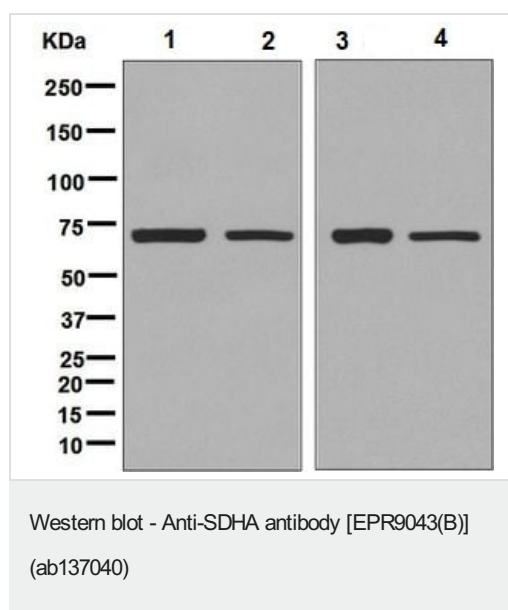
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 72 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab137040 observed at 72 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

ab137040 was shown to specifically react with SDHA in wild-type HEK-293 cells as signal was lost in SDHA knockout cells. Wild-type and SDHA knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab137040 and [ab8245](#) (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



All lanes : Anti-SDHA antibody [EPR9043(B)] (ab137040) at 1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : HepG2 cell lysate

Lane 3 : HT1080 cell lysate

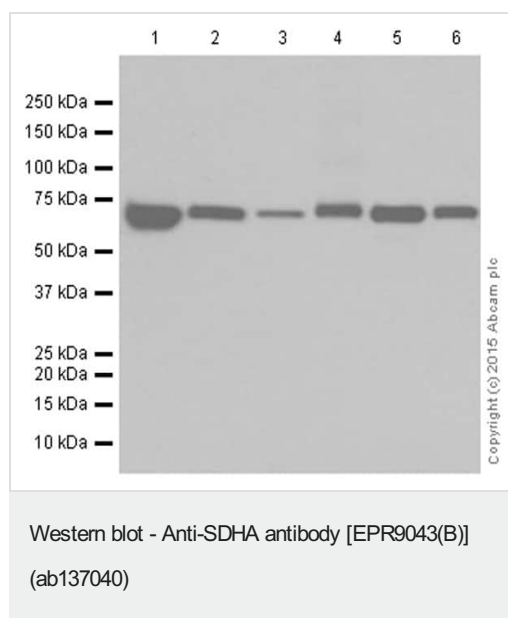
Lane 4 : Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP conjugated Goat anti Rabbit IgG at 1/2000 dilution

Predicted band size: 72 kDa



All lanes : Anti-SDHA antibody [EPR9043(B)] (ab137040) at 1/5000 dilution

Lane 1 : HeLa (human cervix adenocarcinoma) whole cell lysate

Lane 2 : HepG2 (human hepatocellular carcinoma) whole cell lysate

Lane 3 : Jurkat (human acute T cell leukemia) whole cell lysate

Lane 4 : Mouse brain tissue lysate

Lane 5 : Mouse kidney tissue lysate

Lane 6 : Rat brain tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

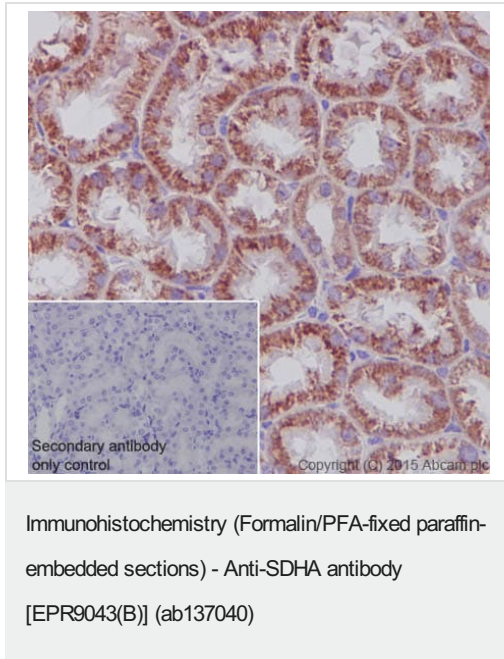
Predicted band size: 72 kDa

Additional bands at: 72 kDa. We are unsure as to the identity of

these extra bands.

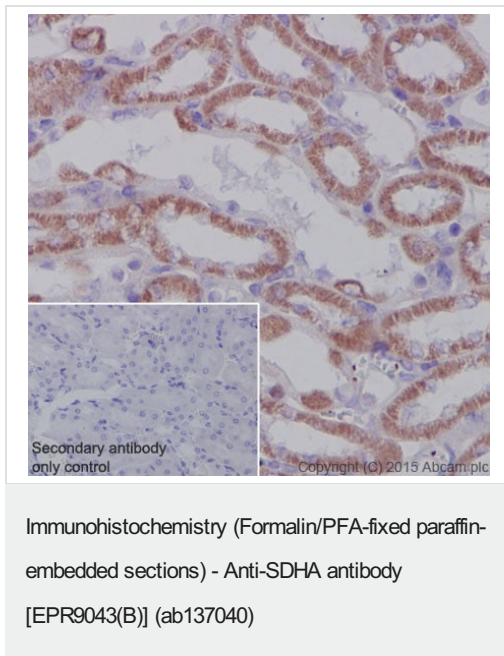
Blocking buffer: 5% NFDM /TBST

Diluting buffer: 5% NFDM /TBST



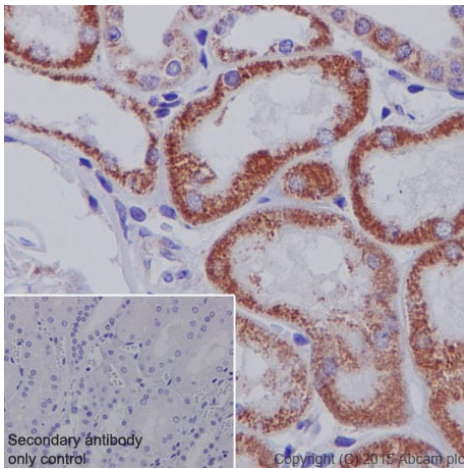
ab137040 staining SDHA in rat kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/1000. A goat anti-rabbit IgG H&L (HRP) [ab97051](#) was used as the secondary antibody at a dilution of 1/500.

Negative control 1: PBS in place of primary antibody.



ab137040 staining SDHA in mouse kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/1000. A goat anti-rabbit IgG H&L (HRP) [ab97051](#) was used as the secondary antibody at a dilution of 1/500.

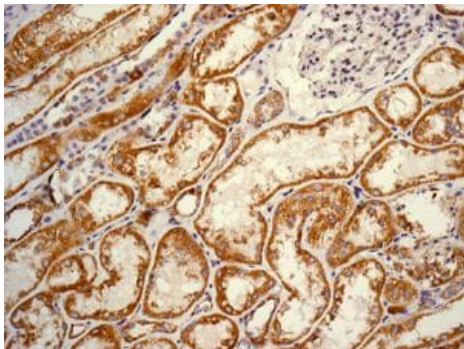
Negative control 1: PBS in place of primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SDHA antibody [EPR9043(B)] (ab137040)

ab137040 staining SDHA in human kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/1000. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody at a dilution of 1/500.

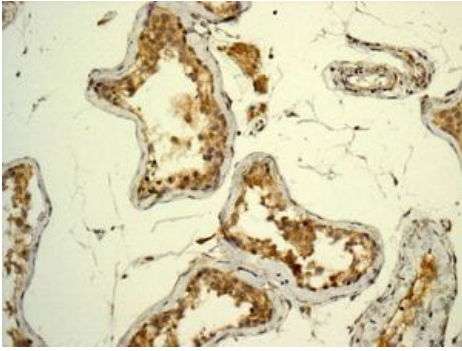
Negative control 1: PBS in place of primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SDHA antibody [EPR9043(B)] (ab137040)

Immunohistochemical analysis of paraffin embedded human kidney tissue labelling SDHA with ab137040 at 1/50 dilution.

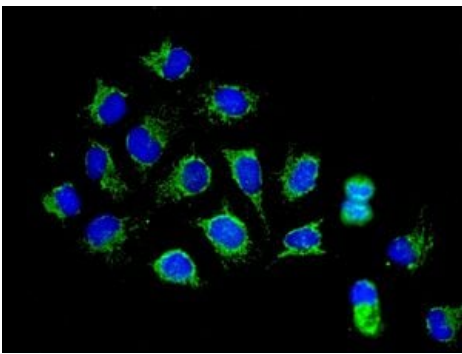
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SDHA antibody [EPR9043(B)] (ab137040)

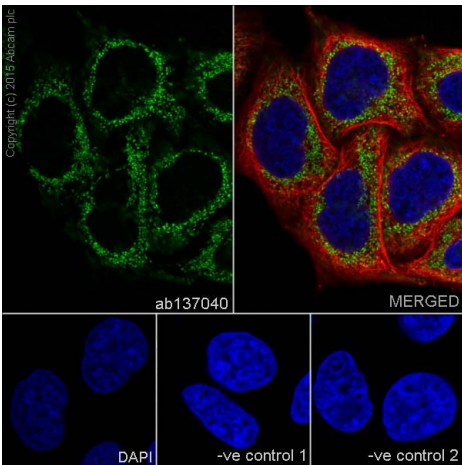
Immunohistochemical analysis of paraffin embedded human testis tissue labelling SDHA with ab137040 at 1/50 dilution.

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



Immunocytochemistry/ Immunofluorescence - Anti-SDHA antibody [EPR9043(B)] (ab137040)

Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labelling SDHA with ab137040 at 1/100 dilution.



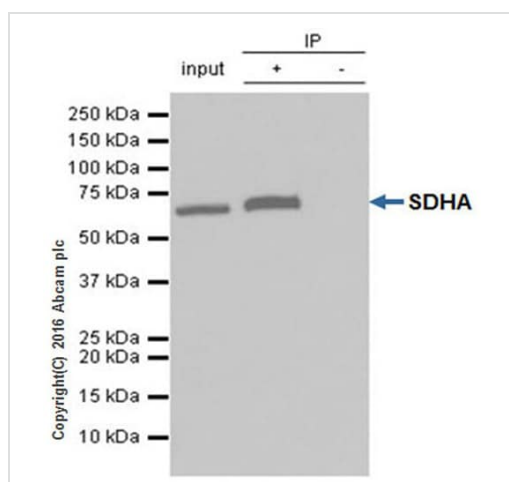
Immunocytochemistry/ Immunofluorescence - Anti-SDHA antibody [EPR9043(B)] (ab137040)

ab137040 staining SDHA in HeLa (human cervix adenocarcinoma) cells by ICC/IF

(Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody at a dilution of 1/250. A goat anti rabbit IgG (Alexa Fluor® 488) ([ab150077](#)) was used as the secondary antibody. [ab7291](#) and [ab150120](#) were used as counterstains for primary antibody ab137040 and secondary antibody [ab150077](#) respectively and DAPI was used as a nuclear counterstain.

Negative control 1: Rabbit primary antibody and anti-mouse secondary antibody ([ab150120](#))

Negative control 2: Mouse primary antibody ([ab7291](#)) and anti-rabbit secondary antibody ([ab150077](#))



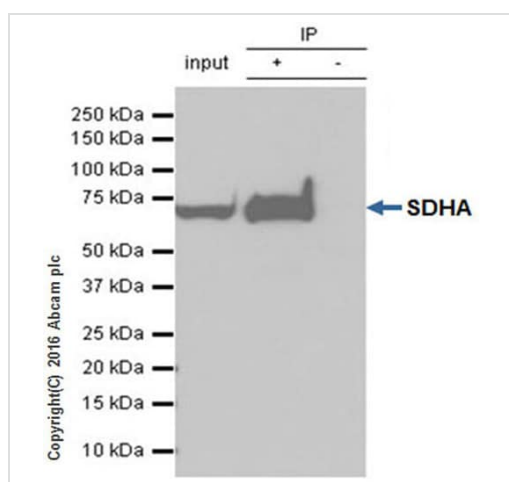
Immunoprecipitation - Anti-SDHA antibody
[EPR9043(B)] (ab137040)

ab137040 immunoprecipitating SDHA. 10µg of Jurkat (Human T cell leukemia cell line from peripheral blood) cell lysate was incubated with primary antibody at a dilution of 1/20 and VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at a dilution of 1/10000.

Lane 1: Jurkat whole cell lysate 10ug

Lane 2: ab137040 IP in Jurkat whole cell lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab137040 in Jurkat whole cell lysate



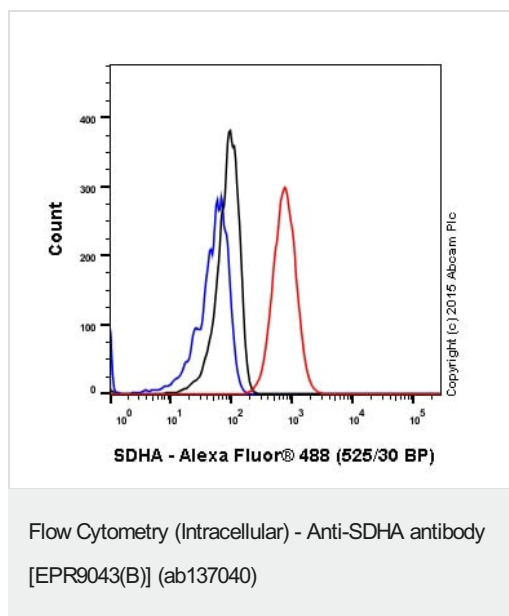
Immunoprecipitation - Anti-SDHA antibody
[EPR9043(B)] (ab137040)

ab137040 immunoprecipitating SDHA. 10µg of HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate was incubated with primary antibody at a dilution of 1/20 and VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at a dilution of 1/10000.

Lane 1: HeLa whole cell lysate (10ug)

Lane 2: ab137040 IP in HeLa whole cell lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab137040 in HeLa whole cell lysate







ab137040 staining SDHA in the human cell line HeLa (human cervix adenocarcinoma) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde and the sample was incubated with the primary antibody at a dilution of 1/500. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/500 was used as the secondary antibody.

Isootype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-SDHA antibody [EPR9043(B)] (ab137040)

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