# abcam

### Product datasheet

## Anti-SDHA antibody [EPR9042(B)] ab139181



ייבעדיו RabMAb

#### 4 References 画像数7

#### 製品の概要

免疫原

製品名 Anti-SDHA antibody [EPR9042(B)]

製品の詳細 Rabbit monoclonal [EPR9042(B)] to SDHA

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P

適用なし: ICC/IF

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 4

Synthetic peptide within Human SDHA aa 100-200. The exact sequence is proprietary.

ポジティブ・コントロール Human fetal heart, fetal kidney, HepG2 and HeLa lysate; Human kidney and testis tissues.

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.

#### 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 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

精製度 Protein A purified

ポリモノ モノクローナル

クローン名

EPR9042(B)

アイソタイプ

ΙgG

#### 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ab139181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		1/1000 - 1/10000. Predicted molecular weight: 72 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

追加情報

Is unsuitable for ICC/IF.

#### 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

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.

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.

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.

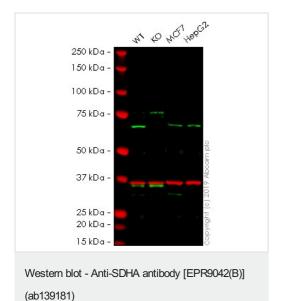
配列類似性

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 [EPR9042(B)] (ab139181) 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

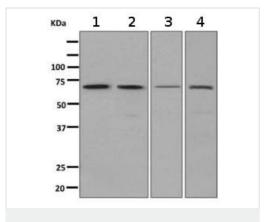
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 72 kDa **Observed band size:** 72 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab139181 observed at 72 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab139181 was shown to recognize SDHA in wild-type HEK-293 cells as signal was lost at the expected MW in SDHA knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and SDHA knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab139181 and <a href="mailto:ab8245">ab8245</a> (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 lgG H&L (IRDye® 800CW) preabsorbed <a href="mailto:ab216773">ab216773</a> and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed <a href="mailto:ab216776">ab216776</a> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-SDHA antibody [EPR9042(B)] (ab139181)

**All lanes :** Anti-SDHA antibody [EPR9042(B)] (ab139181) at 1/1000 dilution

Lane 1 : Human fetal heart tissue lysate

Lane 2 : Human fetal kidney tissue lysate

Lane 3 : HepG2 cell lysate

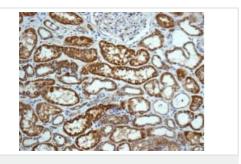
Lane 4: HeLa cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

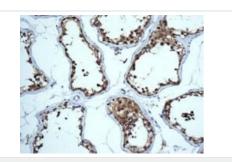
Predicted band size: 72 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SDHA antibody
[EPR9042(B)] (ab139181)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labelling SDHA with ab139181 at 1/100 dilution.

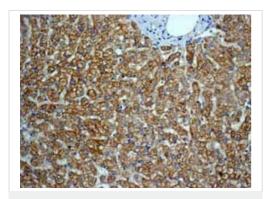
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SDHA antibody
[EPR9042(B)] (ab139181)

Immunohistochemical analysis of paraffin-embedded Human testis tissue labelling SDHA with ab139181 at 1/100 dilution.

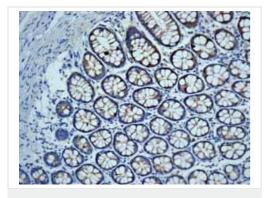
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SDHA antibody [EPR9042(B)] (ab139181)

Immunohistochemical analysis of paraffin embedded Normal Human Liver tissue using ab139181 showing +ve staining.

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SDHA antibody [EPR9042(B)] (ab139181)

Immunohistochemical analysis of paraffin embedded Normal Human Colon tissue using ab139181 showing +ve staining.

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

#### Why choose a recombinant antibody?



Research with confidence Consistent and



Long-term and scalable supply Recombinant



Confirmed specificity

compliant Animal-free production

Anti-SDHA antibody [EPR9042(B)] (ab139181)

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