abcam

Product datasheet

Anti-SIRT4 antibody ab10140

1 Abreviews 18 References 画像数 1

製品の概要

製品名 Anti-SIRT4 antibody

製品の詳細 Goat polyclonal to SIRT4

由来種 Goat

アプリケーション 適用あり: WB, IHC-P

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat, Cow, Dog, Pig

A

免疫原 Synthetic peptide:

SRCGELLPLIDPC

, corresponding to C terminal amino acids 302-314 of Human SIRT4.

Run BLAST with

Run BLAST with

ポジティブ・コントロール

IHC: Human skeletal muscle and pancreas tissue WB: Human kidney and U937 lysate, HEK293 $\,$

cell lysate

特記事項

This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. The protein encoded by this gene is included in class IV of the sirtuin family.

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

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保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

パッファー pH: 7.30

Preservative: 0.02% Sodium azide

Constituents: Tris buffered saline, 0.5% BSA

精製度 Immunogen affinity purified

特記事項(精製) Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity

chromatography using the immunizing peptide.

一次抗体 備考 This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein.

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the sirtuin family.

ポリ/モノ ポリクローナル

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ab10140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		Use a concentration of 1 - 3 µg/ml. Detects a band of approximately 38 kDa (predicted molecular weight: 36 kDa). 1 hour primary incubation is recommended for this product.
IHC-P		Use a concentration of 2 - 3 µg/ml. Steamed antigen retrieval with citrate buffer pH 6 is recommended.

ターゲット情報

機能

Acts as NAD-dependent protein lipoamidase, ADP-ribosyl transferase and deacetylase. Catalyzes more efficiently removal of lipoyl- and biotinyl- than acetyl-lysine modifications. Inhibits the pyruvate dehydrogenase complex (PDH) activity via the enzymatic hydrolysis of the lipoamide cofactor from the E2 component, DLAT, in a phosphorylation-independent manner (PubMed:25525879). Catalyzes the transfer of ADP-ribosyl groups onto target proteins, including mitochondrial GLUD1, inhibiting GLUD1 enzyme activity. Acts as a negative regulator of mitochondrial glutamine metabolism by mediating mono ADP-ribosylation of GLUD1: expressed in response to DNA damage and negatively regulates anaplerosis by inhibiting GLUD1, leading to block metabolism of glutamine into tricarboxylic acid cycle and promoting cell cycle arrest (PubMed:16959573, PubMed:17715127). In response to mTORC1 signal, SIRT4 expression is repressed, promoting anaplerosis and cell proliferation. Acts as a tumor suppressor (PubMed:23562301, PubMed:23663782). Also acts as a NAD-dependent protein deacetylase: mediates deacetylation of 'Lys-471' of MLYCD, inhibiting its activity, thereby acting as a regulator

of lipid homeostasis (By similarity). Controls fatty acid oxidation by inhibiting PPARA

transcriptional activation. Impairs SIRT1:PPARA interaction probably through the regulation of

NAD(+) levels (PubMed:24043310). Down-regulates insulin secretion.

組織特異性 Detected in vascular smooth muscle and striated muscle. Detected in insulin-producing beta-cells

in pancreas islets of Langerhans (at protein level). Widely expressed. Weakly expressed in

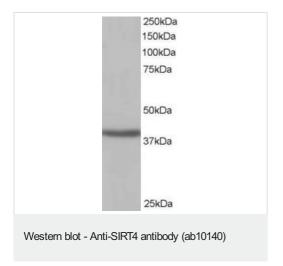
leukocytes and fetal thymus.

配列類似性 Belongs to the sirtuin family. Class II subfamily.

Contains 1 deacetylase sirtuin-type domain.

細胞内局在 Mitochondrion matrix.

画像



Anti-SIRT4 antibody (ab10140) at 1 μ g/ml + Human Kidney Lysate (RIPA buffer).35 ug total protein was loaded.

Predicted band size: 36 kDa

ab10140 staining (1µg/ml) of Human Kidney lysate (RIPA buffer, 35µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Incubation with the primary Ab was carried out for 1 hr at room temperature.

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