




Anti-SIRT4 antibody ab10140

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概述	
产品名称	Anti-SIRT4抗体
描述	山羊多克隆抗体to SIRT4
宿主	Goat
经测试应用	适用于: WB, IHC-P
种属反应性	与反应: Human 预测可用于: Mouse, Rat, Cow, Dog, Pig 
免疫原	Synthetic peptide: SRCGELLPLIDPC , corresponding to C terminal amino acids 302-314 of Human SIRT4.  Run BLAST with  Run BLAST with
阳性对照	IHC: Human skeletal muscle and pancreas tissue WB: Human kidney and U937 lysate, HEK293 cell lysate
常规说明	<p>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.</p> <p>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.</p> <p>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</p>

性能	
形式	Liquid

存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
纯度	Immunogen affinity purified
纯化说明	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Primary antibody说明	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.
克隆	多克隆
同种型	IgG

应用

The Abpromise guarantee **Abpromise™** 承诺保证使用ab10140于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
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.

靶标

功能	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
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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.

组织特异性

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.

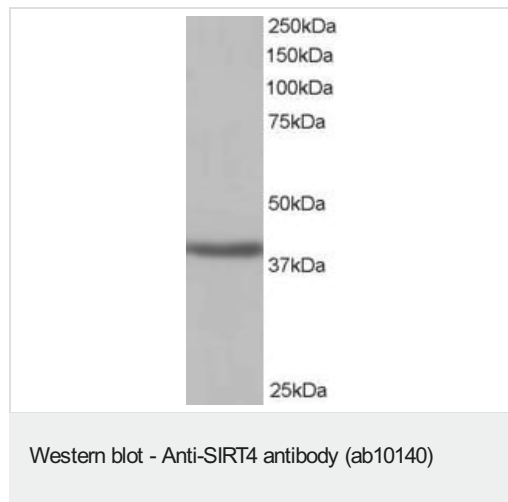
序列相似性

Belongs to the sirtuin family. Class II subfamily.
Contains 1 deacetylase sirtuin-type domain.

细胞定位

Mitochondrion matrix.

图片



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

Predicted band size: 36 kDa

ab10140 staining (1 µg/ml) of Human Kidney lysate (RIPA buffer, 35 µg 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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