

Product datasheet

Recombinant Human SIRT4 protein ab79949

1 图像

描述

产品名称	重组人SIRT4蛋白
纯度	> 90 % SDS-PAGE.
表达系统	Escherichia coli
Accession	<u>Q9Y6E7</u>
蛋白长度	Protein fragment
无动物成分	No
性质	Recombinant
种属	Human
氨基酸	25 to 314
标签	GST tag N-Terminus

技术指标

Our **Abpromise guarantee** covers the use of **ab79949** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	SDS-PAGE
形式	Liquid

制备和贮存

稳定性和存储	Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.395% Tris HCl, 0.05% Tween, 20% Glycerol (glycerin, glycerine), 0.58% Sodium chloride
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常规信息

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
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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.

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.

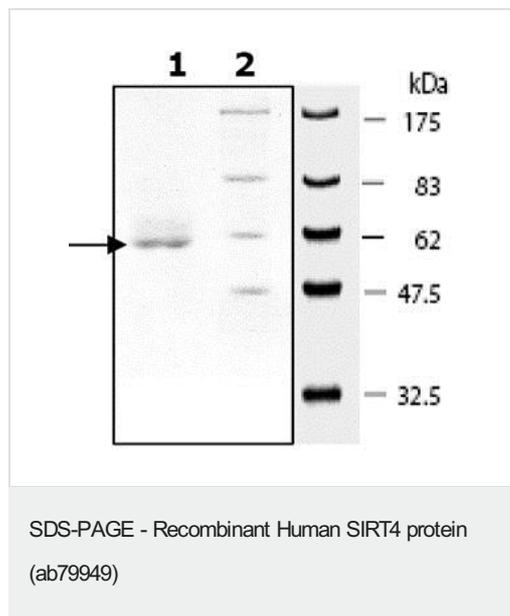
序列相似性

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

细胞定位

Mitochondrion matrix.

图片



10% SDS-PAGE, Coomassie staining.

Lane 1: ab79949 8 μ g.

Lane 2: Protein marker.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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