

Product datasheet

Recombinant Human SIRT4 protein ab101713

1 图像

概述

产品名称	重组人SIRT4蛋白
蛋白长度	Full length protein

描述

性质	Recombinant
来源	Escherichia coli

氨基酸序列

Accession	Q9Y6E7
种属	Human
序列	MKMSFALTFRSAKGRWIANPSQPCSKASIGLFVPASPPLDPEKVKELQRF ITLSKRLLVMTGAGISTESGIPDYRSEKVGLYARTDRRPIQHGDFVRSAP IRQRYWARNFVGWPQFSSHQPNPAHWALSTWEKLGKLYWLVTQNVDALHT KAGSRRLTELHGCM DRVLCDCGEQTPRGVLQERFQVLNPTWSAEAHGLA PDGDVFLSEEQVRSFQVPTCVQC GGHLKPDVVFFGDTVNPDKVDFVHKRV KEADSLLVGSSLQVYSGYRFILTAWEKKLPIAILNIGPTRSDDLACLKL NSRCGELLPLIDPC

分子量	62 kDa including tags
氨基酸	1 to 314
标签	GST tag N-Terminus

技术指标

Our [Abpromise guarantee](#) covers the use of **ab101713** 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
纯度	> 70 % SDS-PAGE.
形式	Liquid

制备和贮存

稳定性和存储

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

Preservative: None

Constituents: 25% Glycerol, 50mM Tris HCl, 150mM Sodium chloride, 10mM Glutathione, 0.25mM DTT, 0.1mM EDTA, 0.1mM PMSF, pH 7.5

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 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

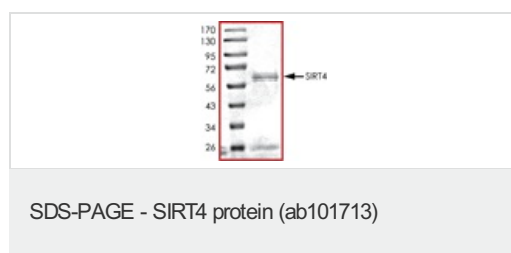
Belongs to the sirtuin family. Class II subfamily.

Contains 1 deacetylase sirtuin-type domain.

细胞定位

Mitochondrion matrix.

图片



The purity of ab101713 was determined to be 90% by densitometry.

Approximate MWt: 62kDa

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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