

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  
IRQRYWARNFVGWPQFSSHQPNAHWALSTWEKLGKLYWLVTQNVDALHT  
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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