abcam

Product datasheet

Anti-SIRT5 antibody ab105040

2 References 2 图像

概述

产**品名称** Anti-SIRT5抗体

描述 兔多克隆抗体to SIRT5

宿主 Rabbit

经测试应用 适用于: WB, ICC/IF

种属反应性 与反应: Human

预测可用于: Mouse, Cow, Dog, Pig, Macaque monkey, Orangutan 4

免疫原 Synthetic peptide corresponding to Human SIRT5 aa 150-250 conjugated to keyhole limpet

haemocyanin.

(Peptide available as ab117890)

阳性对照 This antibody gave a positive signal in Human small intestine tissue lysate.

常规说明

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

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯**度** Immunogen affinity purified

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克隆 多克隆

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab105040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 µg/ml. Detects a band of approximately 37 kDa (predicted molecular weight: 34 kDa).
ICC/IF		Use a concentration of 5 µg/ml.

靶标

功能 NAD-dependent lysine demalonylase, desuccinylase and deglutarylase that specifically removes

malonyl, succinyl and glutaryl groups on target proteins (PubMed:21908771, PubMed:22076378, PubMed:24703693). Activates CPS1 and contributes to the regulation of blood ammonia levels during prolonged fasting: acts by mediating desuccinylation and deglutarylation of CPS1, thereby increasing CPS1 activity in response to elevated NAD levels during fasting (PubMed:22076378, PubMed:24703693). Activates SOD1 by mediating its desuccinylation loading to reduced

PubMed:24703693). Activates SOD1 by mediating its desuccinylation, leading to reduced reactive oxygen species (PubMed:24140062). Modulates ketogenesis through the

desuccinylation and activation of HMGCS2 (By similarity). Has weak NAD-dependent protein deacetylase activity; however this activity may not be physiologically relevant in vivo. Can deacetylate cytochrome c (CYCS) and a number of other proteins in vitro such as UOX.

组织特异性 Widely expressed.

序列相似性 Belongs to the sirtuin family. Class III subfamily.

Contains 1 deacetylase sirtuin-type domain.

结**构域** In contrast to class I sirtuins, class III sirtuins have only weak deacetylase activity. Difference in

substrate specificity is probably due to a larger hydrophobic pocket with 2 residues (Tyr-102 and

Arg-105) that bind to malonylated and succinylated substrates and define the specificity

(PubMed:22076378).

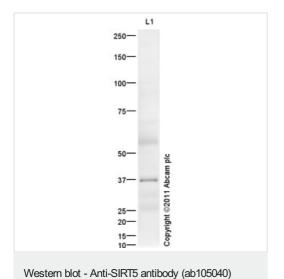
细胞定位 Mitochondrion; Cytoplasm. Mitochondrion and Mitochondrion matrix. Mitochondrion

intermembrane space. Cytoplasm, cytosol. Nucleus. Mainly mitochondrial. Also present

extramitochondrially: a fraction is present in the cytosol and very small amounts are also detected

in the nucleus.

图片



Anti-SIRT5 antibody (ab105040) at 1 μ g/ml + Human small intestine tissue lysate - total protein (ab29276) at 10 μ g

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

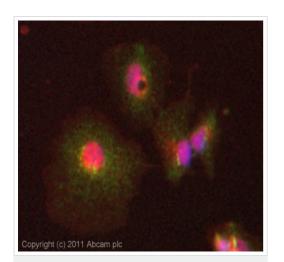
Predicted band size: 34 kDa **Observed band size:** 37 kDa

Additional bands at: 56 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 20 minutes

The predicted molecular weight of SIRT5 is 34 kDa (SwissProt), however we expect to observe a banding pattern at 37 kDa. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented above.



Immunocytochemistry/ Immunofluorescence - Anti-SIRT5 antibody (ab105040)

ICC/IF image of ab105040 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab105040, 5 μ g/ml) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit lgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 μ M. This antibody also gave a positive result in 100% methanol fixed (5 min) HepG2 and MCF7 cells at 5 μ g/ml.

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