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Datasheet for ABIN872709

anti-SIRT4 antibody (AA 51-150)

4 Images

2 Publications

Overview

Quantity:	100 µL
Target:	SIRT4
Binding Specificity:	AA 51-150
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SIRT4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human SIRT4/SIR 2 like protein 4
Isotype:	IgG
Cross-Reactivity:	Mouse, Rat
Predicted Reactivity:	Human,Cow,Sheep,Pig,Horse,Rabbit,Zebrafish,Drosophila
Purification:	Purified by Protein A.

Target Details

Target:	SIRT4
Alternative Name:	SIRT4 (SIRT4 Products)
Background:	Synonyms: SIR2L4, NAD-dependent protein deacetylase sirtuin-4, NAD-dependent ADP-

Target Details

ribosyltransferase sirtuin-4, Regulatory protein SIR2 homolog 4, SIR2-like protein 4, SIRT4

Background: Acts both as NAD-dependent protein ADP-ribosyl transferase and NAD-dependent protein deacetylase. 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. In response to mTORC1 signal, SIRT4 expression is repressed, promoting anaplerosis and cell proliferation. Acts as a tumor suppressor. 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. Down-regulates insulin secretion.

Gene ID: 23409

UniProt: [Q9Y6E7](#)

Pathways: [Negative Regulation of Hormone Secretion](#)

Application Details

Application Notes: WB 1:300-5000
ELISA 1:500-1000
IHC-P 1:200-400

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: 0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Storage: 4 °C, -20 °C

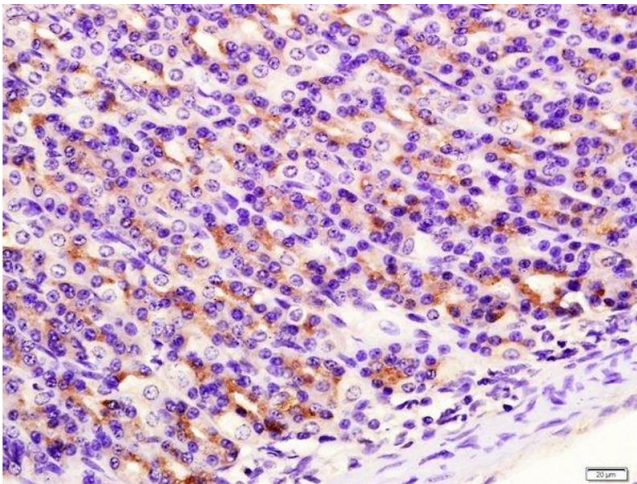
Storage Comment: Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Expiry Date: 12 months

Product cited in: Takumida, Takumida, Katagiri, Anniko: "Localization of sirtuins (SIRT1-7) in the aged mouse inner ear." in: **Acta oto-laryngologica**, pp. 1-12, (2015) ([PubMed](#)).

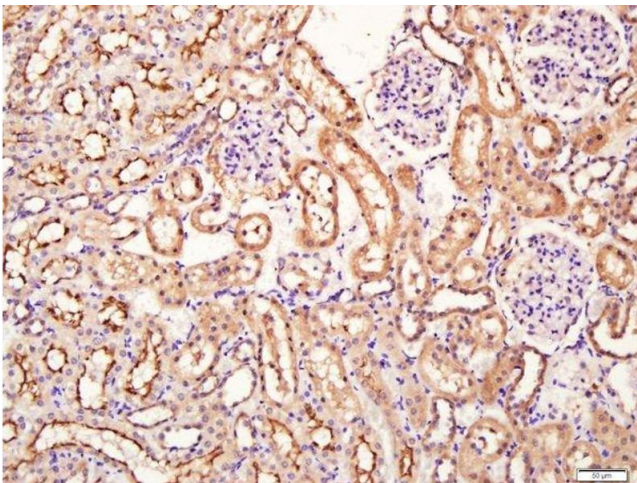
Takumida, Takumida, Anniko: "Localization of sirtuins in the mouse inner ear." in: **Acta oto-laryngologica**, Vol. 134, Issue 4, pp. 331-8, (2014) ([PubMed](#)).

Images



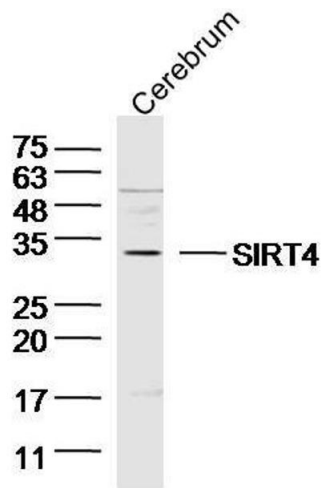
Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Paraformaldehyde-fixed, paraffin embedded rat stomach tissue, Antigen retrieval by boiling in sodium citrate buffer(pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer (normal goat serum) at 37°C for 20min, Antibody incubation with Rabbit Anti-SIRT4 Polyclonal Antibody, Unconjugated at 1:400 overnight at 4°C, followed by a conjugated secondary and DAB staining



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Paraformaldehyde-fixed, paraffin embedded rat kidney tissue, Antigen retrieval by boiling in sodium citrate buffer(pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer (normal goat serum) at 37°C for 20min, Antibody incubation with Rabbit Anti-SIRT4 Polyclonal Antibody, Unconjugated at 1:400 overnight at 4°C, followed by a conjugated secondary and DAB staining



Western Blotting

Image 3. Mouse cerebrum lysates probed with SIRT4 Polyclonal Antibody, unconjugated at 1:300 overnight at 4°C followed by a conjugated secondary antibody at 1:10000 for 90 minutes at 37°C.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN872709.