

Rabbit anti-Human SIRT2 Polyclonal Antibody | anti-SIRT2 antibody

SIRT2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA232949	Rabbit	Human	Immunofluorescence, Immunohistochemistry, ELISA

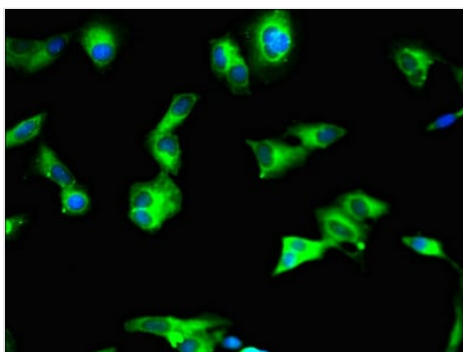
PRODUCT SYNONYMS

SIRT2; Polyclonal Antibody; SIRT2 Antibody; NAD-dependent protein deacetylase sirtuin-2; Regulatory protein SIR2 homolog 2; SIR2-like protein 2; SIR2L; SIR2L2; anti-SIRT2 antibody

PRODUCT SPECIFICATIONS

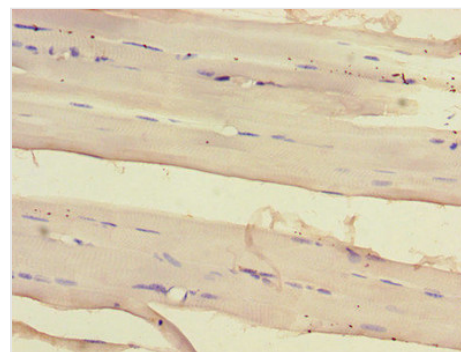
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	>95%, Protein G purified
Form/Format	Liquid
Sequence Length	234
Applicable Applications for anti-SIRT2 antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), ELISA
Immunogen	Recombinant human NAD-dependent protein deacetylase sirtuin-2 protein (177-279AA)
Preservative	0.03% Proclin 300
Constituents	50% Glycerol, 0.01M PBS, PH 7.4
Conjugation	Non-conjugated
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-31912 / sc-20966
Preparation and Storage	Shipped at 4 degree C. Upon delivery aliquot and store at -20 degree C or -80 degree C. Avoid repeated freeze.

IMAGES



IF (Immunofluorescence)

Immunofluorescent analysis of Hela cells using AAA232949 at a dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)



IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded human skeletal muscle tissue using AAA232949 at dilution of 1:100

ADDITIONAL INFORMATION

Related Product Information for anti-SIRT2 antibody	NAD-dependent protein deacetylase, which deacetylates internal lysines on histone and alpha-tubulin as well as many other proteins such as key transcription factors. Participates in the modulation of multiple and diverse biological processes such as cell cycle control, genomic integrity, microtubule dynamics, cell differentiation, metabolic networks, and autophagy. Plays a major role in the control of cell cycle progression and genomic stability. Functions in the antephasic checkpoint preventing precocious mitotic entry in response to microtubule stress agents, and hence allowing proper inheritance of chromosomes. Positively regulates the anaphase promoting complex/cyclosome (APC/C) ubiquitin ligase complex activity by deacetylating CDC20 and FZR1, then allowing progression through mitosis. Associates both with chromatin at transcriptional start sites (TSSs) and enhancers of active genes. Plays a role in cell cycle and chromatin compaction through epigenetic modulation of the regulation of histone H4 'Lys-20' methylation (H4K20me1) during early mitosis. Specifically deacetylates histone H4 at 'Lys-16' (H4K16ac) between the G2/M transition and metaphase enabling H4K20me1 deposition by KMT5A leading to ulterior levels of H4K20me2 and H4K20me3 deposition throughout cell cycle, and mitotic S-phase progression. Deacetylates KMT5A modulating KMT5A chromatin localization during the mitotic stress response. Deacetylates also histone H3 at 'Lys-57' (H3K56ac) during the mitotic G2/M transition. Upon bacterium <i>Listeria monocytogenes</i> infection, deacetylates 'Lys-18' of histone H3 in a receptor tyrosine kinase MET- and PI3K/Akt-dependent manner, thereby inhibiting transcriptional activity and promoting late stages of listeria infection. During oocyte meiosis progression, may deacetylate histone H4 at 'Lys-16' (H4K16ac) and alpha-tubulin, regulating spindle assembly and chromosome alignment by influencing microtubule dynamics and kinetochore function. Deacetylates alpha-tubulin at 'Lys-40' and hence controls neuronal motility, oligodendroglial cell arbor projection processes and proliferation of non-neuronal cells. Phosphorylation at Ser-368 by a G1/S-specific cyclin E-CDK2 complex inactivates SIRT2-mediated alpha-tubulin deacetylation, negatively regulating cell adhesion, cell migration and neurite outgrowth during neuronal differentiation. Deacetylates PARD3 and participates in the regulation of Schwann cell peripheral myelination formation during early postnatal development and during postinjury remyelination. Involved in several cellular metabolic pathways. Plays a role in the regulation of blood glucose homeostasis by deacetylating and stabilizing phosphoenolpyruvate carboxykinase PCK1 activity in response to low nutrient availability. Acts as a key regulator in the pentose phosphate pathway (PPP) by deacetylating and activating the glucose-6-phosphate G6PD enzyme, and therefore, stimulates the production of cytosolic NADPH to counteract oxidative damage. Maintains energy homeostasis in response to nutrient deprivation as well as energy expenditure by inhibiting adipogenesis and promoting lipolysis. Attenuates adipocyte differentiation by deacetylating and promoting FOXO1 interaction to PPARG and subsequent repression of PPARG-dependent transcriptional activity. Plays a role in the regulation of lysosome-mediated degradation of protein aggregates by autophagy in neuronal cells. Deacetylates FOXO1 in response to oxidative stress or serum deprivation, thereby negatively regulating FOXO1-mediated autophagy. Deacetylates a broad range of transcription factors and co-regulators regulating target gene expression. Deacetylates transcriptional factor FOXO3 stimulating the ubiquitin ligase SCF(SKP2)-mediated FOXO3 ubiquitination and degradation. Deacetylates HIF1A and therefore promotes HIF1A degradation and inhibition of HIF1A transcriptional activity in tumor cells in response to hypoxia. Deacetylates RELA in the cytoplasm inhibiting NF-kappaB-dependent transcription activation upon TNF-alpha stimulation. Inhibits transcriptional activation by deacetylating p53/TP53 and EP300. Deacetylates also EIF5A. Functions as a negative regulator on oxidative stress-tolerance in response to anoxia-reoxygenation conditions. Plays a role as tumor suppressor.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	300797705
NCBI GeneID	22933
NCBI Accession #	NP_001180215.1
NCBI GenBank Nucleotide #	NM_001193286.1
UniProt Accession #	Q8IXJ6; Q95889; Q924Y7; Q9P0G8; Q9UNT0; Q9Y6E9; A8K3V1; B2RB45; U5TP13
Molecular Weight	35,654 Da
NCBI Official Full Name	NAD-dependent protein deacetylase sirtuin-2 isoform 3
NCBI Official Synonym Full Names	sirtuin 2
NCBI Official Symbol	SIRT2
NCBI Official Synonym Symbols	SIR2; SIR2L; SIR2L2
NCBI Protein Information	NAD-dependent protein deacetylase sirtuin-2

UniProt Protein Name	NAD-dependent protein deacetylase sirtuin-2
UniProt Gene Name	SIRT2
UniProt Synonym Gene Names	SIR2L; SIR2L2
UniProt Entry Name	SIR2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/sirt2-antibody-immunofluorescence-immunohistochemistry-elisa/232949>