

DATASHEET

SIRT3 Rabbit Polyclonal Antibody

CAT. NO. APA09780

KEY FEATURES

Target	SIRT3	Source / Host	Rabbit
Reactivity	Human	Clonality	Polyclonal
Applications	WB	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

NAD-dependent protein deacetylase . Activates or deactivates mitochondrial target proteins by deacetylating key lysine residues . Known targets include ACS1, IDH, GDH, SOD2, PDHA1, LCAD, SDHA, MRPL12 and the ATP synthase subunit ATP5PO . Contributes to the regulation of the cellular energy metabolism . Important for regulating tissue-specific ATP levels . In response to metabolic stress, deacetylates transcription factor FOXO3 and recruits FOXO3 and mitochondrial RNA polymerase POLRMT to mtDNA to promote mtDNA transcription . Acts as a regulator of ceramide metabolism by mediating deacetylation of ceramide synthases CERS1, CERS2 and CERS6, thereby increasing their activity and promoting mitochondrial ceramide accumulation . Regulates hepatic lipogenesis .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
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*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

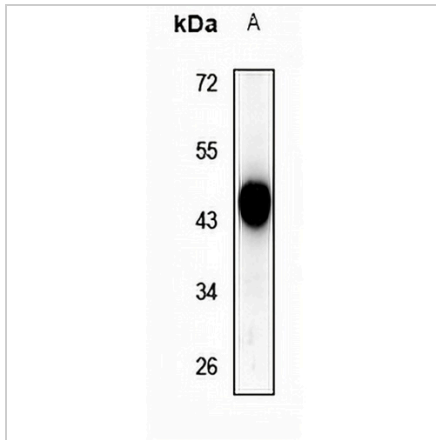
Description	Rabbit polyclonal antibody to SIRT3
Specificity	Recognizes endogenous levels of SIRT3 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human SIRT3. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 43 kD; Observed: 44 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	SIR2L3; NAD-dependent protein deacetylase sirtuin-3 mitochondrial; hSIRT3; Regulatory protein SIR2 homolog 3; SIR2-like protein 3
Gene Symbol	SIRT3
Entrez Gene	23410(Human)
SwissProt	Q9NTG7(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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DATA

Western blot analysis of SIRT3 expression in HCT116 (A) whole cell lysates. (Predicted band size: 43 kD; Observed band size: 44 kD)

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.