

**DATASHEET**
**SIRT1 Rabbit Polyclonal Antibody**
**CAT. NO. APA14003**
**KEY FEATURES**

Target	SIRT1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IF/ICC	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 that links transcriptional regulation directly to intracellular energetics and participates in the coordination of several separated cellular functions such as cell cycle, response to DNA damage, metabolism, apoptosis and autophagy . Can modulate chromatin function through deacetylation of histones and can promote alterations in the methylation of histones and DNA, leading to transcriptional repression . Deacetylates a broad range of transcription factors and coregulators, thereby regulating target gene expression positively and negatively . Serves as a sensor of the cytosolic ratio of NAD(+)/NADH which is altered by glucose deprivation and metabolic changes associated with caloric restriction .

**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
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to SIRT1
Specificity	Recognizes endogenous levels of SIRT1 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human SIRT1
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 81; Observed: 120; 100 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	SIR2L1; NAD-dependent protein deacetylase sirtuin-1; hSIRT1; Regulatory protein SIR2 homolog 1; SIR2-like protein 1; hSIR2
Gene Symbol	SIRT1
Entrez Gene	23411(Human); 93759(Mouse)
SwissProt	Q96EB6(Human); Q923E4(Mouse)

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

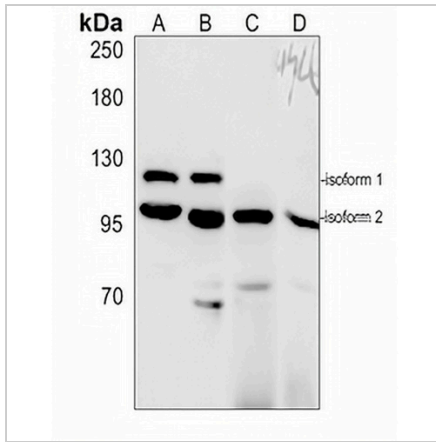
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

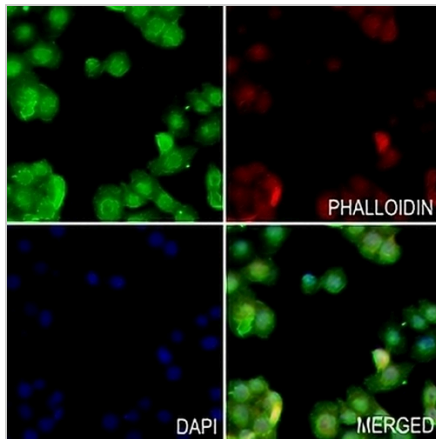
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**DATA**



Western blot analysis of SIRT1 expression in Myla2059 (A), SGC7901 (B), mouse spleen (C), rat spleen (D) whole cell lysates. (Predicted band size: 81; 61 kD; Observed band size: 120; 100 kD)



Immunofluorescent analysis of SIRT1 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

**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.