

Datasheet for ABIN6147784  
**anti-SIRT1 antibody (AA 448-747)**

## 9 Images

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## Overview

Quantity:	100 µL
Target:	SIRT1
Binding Specificity:	AA 448-747
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SIRT1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunofluorescence (IF)

## Product Details

Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 448-747 of human SIRT1 (NP_036370.2).
Sequence:	VALIPSSIPHPVQILINREPLPHLHFDVE LLGDCDVIIN ELCHRLGG EYAKLCCNPVKL SEITEKPPRT QKELAYLSEL PPTPLHVSED SSSPERTSPP DSSVIVTLLD QAAKSNDLDD VSESKGCMEE KPQEVQTSRN VESIAEQMEN PDLKNVGSST GEKNERTSVA GTVRKCWPNR VAKEQISRRL DGNQYLFLPP NRYIFHGAEV YSDSEDDVLS SSSCGSNSDS GTCQSPSLEE PMEDESEIEE FYNGLEDEPD VPERAGGAGF GTDGDDQEI NEAISVKQEV TDMNYP SNKS
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Polyclonal Antibodies

## Target Details

Target:	SIRT1
Alternative Name:	SIRT1 ( <a href="#">SIRT1 Products</a> )
Background:	<p>This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined, however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. The protein encoded by this gene is included in class I of the sirtuin family. Alternative splicing results in multiple transcript variants.,SIR2,SIR2L1,SIR2alpha,SIRT1,sirtuin 1,Epigenetics &amp; Nuclear Signaling,Chromatin Modifying Enzymes,Deacetylation,Cell Biology &amp; Developmental Biology,Apoptosis,Endocrine &amp; Metabolism,Mitochondrial metabolism,AMPK Signaling Pathway,SIRT1</p>
Molecular Weight:	61 kDa/81 kDa
Gene ID:	23411
UniProt:	<a href="#">Q96EB6</a>
Pathways:	<a href="#">MAPK Signaling</a> , <a href="#">Intracellular Steroid Hormone Receptor Signaling Pathway</a> , <a href="#">Regulation of Intracellular Steroid Hormone Receptor Signaling</a> , <a href="#">Carbohydrate Homeostasis</a> , <a href="#">Positive Regulation of Endopeptidase Activity</a> , <a href="#">Regulation of Carbohydrate Metabolic Process</a> , <a href="#">Positive Regulation of Response to DNA Damage Stimulus</a> , <a href="#">Negative Regulation of intrinsic apoptotic Signaling</a>

## Application Details

Application Notes:	WB,1:500 - 1:2000,IHC,1:50 - 1:200,IF,1:50 - 1:200,IP,1:50 - 1:200
Comment:	HIGH QUALITY
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

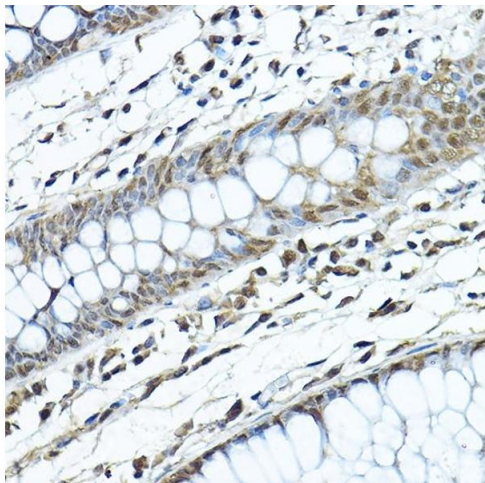
Handling

should be handled by trained staff only.

Storage: -20 °C

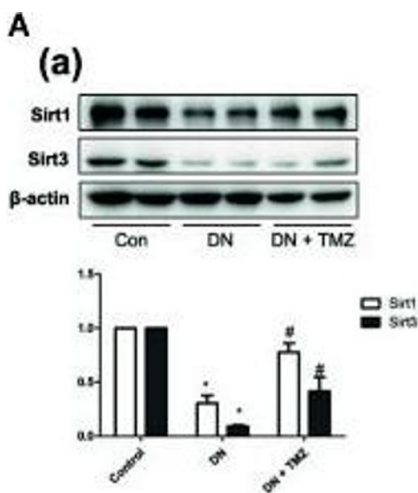
Storage Comment: Store at -20°C. Avoid freeze / thaw cycles.

Images



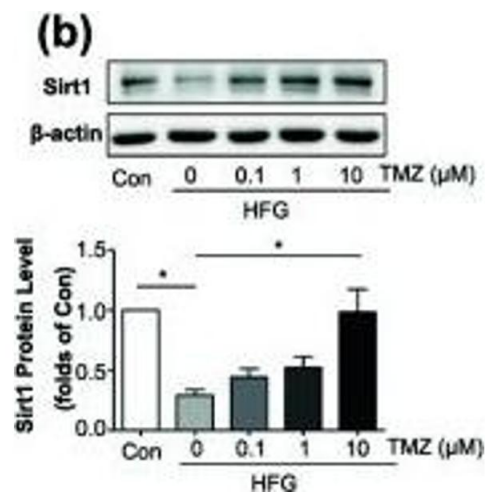
Immunohistochemistry

**Image 1.** Immunohistochemistry of paraffin-embedded human colon using [KO Validated] SIRT1 Rabbit pAb (ABIN6129328, ABIN6147784, ABIN6147785 and ABIN6215138) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Western Blotting

**Image 2.** Trimetazidine (TMZ) reduced HFG-induced ROS generation and EMT depending on upregulation of Sirt1. (A-a) Western blots analysis of Sirt1 and Sirt3 in the kidneys of diabetic rats and TMZ treated rats. (A-b) Western blots analysis of Sirt1 in HK-2 cells treated with HFG and different concentrations of TMZ for 48 h. (B-E) HK-2 cells were treated with or without HFG, TMZ, si-NC and si-Sirt1 for 48 h. (B) Images of DHE fluorescence. Scale bar, 50 μm. (C) Western blots analysis of E-cadherin, α-SMA and Sirt1. (D) The relative expression level of acetylated-FoxO1 measured by IP. (E) Western blots analysis of Sod2 and Sirt1. Con, normal control, HFG, high fat and high glucose, IP, immunoprecipitation, WB, western blot, Ac-lys, acetyl lysine level. Data were expressed as mean ± SEM (n = 3), \*P < 0.05 (one-way ANOVA with Newman-Keuls post analysis). - figure provided by CiteAb. Source: PMID32848753



### Western Blotting

**Image 3.** Trimetazidine (TMZ) reduced HFG-induced ROS generation and EMT depending on upregulation of Sirt1. (A-a) Western blots analysis of Sirt1 and Sirt3 in the kidneys of diabetic rats and TMZ treated rats. (A-b) Western blots analysis of Sirt1 in HK-2 cells treated with HFG and different concentrations of TMZ for 48 h. (B-E) HK-2 cells were treated with or without HFG, TMZ, si-NC and si-Sirt1 for 48 h. (B) Images of DHE fluorescence. Scale bar, 50  $\mu$ m. (C) Western blots analysis of E-cadherin,  $\alpha$ -SMA and Sirt1. (D) The relative expression level of acetylated-FoxO1 measured by IP. (E) Western blots analysis of Sod2 and Sirt1. Con, normal control, HFG, high fat and high glucose, IP, immunoprecipitation, WB, western blot, Ac-lys, acetyl lysine level. Data were expressed as mean  $\pm$  SEM (n = 3), \*P < 0.05 (one-way ANOVA with Newman-Keuls post analysis). - figure provided by CiteAb. Source: PMID32848753

Please check the [product details page](#) for more images. Overall 9 images are available for ABIN6147784.