

Datasheet for ABIN3042483  
**anti-SIRT1 antibody (AA 112-311)**



[Go to Product page](#)

2 Images

1 Publication

## Overview

Quantity:	100 µg
Target:	SIRT1
Binding Specificity:	AA 112-311
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SIRT1 antibody is un-conjugated
Application:	Western Blotting (WB)

## Product Details

Purpose:	Rabbit IgG polyclonal antibody for NAD-dependent protein deacetylase sirtuin-1(SIRT1) detection. Tested with WB in Human.
Immunogen:	E.coli-derived human SIRT1 recombinant protein (Position: R112-K311). Human SIRT1 shares 90% amino acid (aa) sequence identity with mouse SIRT1.
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	<p>Rabbit IgG polyclonal antibody for NAD-dependent protein deacetylase sirtuin-1(SIRT1) detection. Tested with WB in Human.</p> <p>Gene Name: sirtuin 1</p> <p>Protein Name: NAD-dependent protein deacetylase sirtuin-1</p>
Purification:	Immunogen affinity purified.

## Target Details

Target:	SIRT1
Alternative Name:	SIRT1 ( <a href="#">SIRT1 Products</a> )
Background:	<p>Sirtuin 1, also known as SIR2L1 or SIRT1, is a protein that in humans is encoded by the SIRT1 gene. It is mapped to 10q21.3. Sirtuin 1 is a member of the sirtuin family of proteins, homologs of the Sir2 gene in <i>S. cerevisiae</i>. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. Sirtuin 1 is downregulated in cells that have high insulin resistance and inducing its expression increases insulin sensitivity, suggesting the molecule is associated with improving insulin sensitivity. Furthermore, Sirtuin 1 was shown to de-acetylate and affect the activity of both members of the PGC1-alpha/ERR-alpha complex, which are essential metabolic regulatory transcription factors.</p> <p>Synonyms: 75SirT1 antibody BA57G10.4 antibody hSIR2 antibody hSIRT1 antibody HST2, <i>S. cerevisiae</i>, homolog of antibody NAD dependent deacetylase SIRT1 antibody NAD dependent deacetylase sirtuin 1 antibody NAD dependent protein deacetylase sirtuin 1 antibody OTTHUMP00000198111 antibody OTTHUMP00000198112 antibody Regulatory protein SIR2 homolog 1 antibody SIR1_HUMAN antibody SIR2 like 1 antibody SIR2 like protein 1 antibody SIR2, <i>S.cerevisiae</i>, homolog-like 1 antibody SIR2-like protein 1 antibody SIR2ALPHA antibody SIR2alpha protein antibody SIR2L1 antibody SIRT 1 antibody Sirt1 antibody SIRT1 Sir2 like proteins (siruitins) type 1 antibody SIRT1: sirtuin (silent mating type information regulation 2 homolog) 1 (<i>S. cerevisiae</i>) antibody SirtT1 75 kDa fragment antibody sirtuin (silent mating type information regulation 2 homolog) 1 (<i>S. cerevisiae</i>) antibody Sirtuin 1 antibody sirtuin antibody Sirtuin type 1 antibody</p>
Gene ID:	23411
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:	<p>WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, The detection limit for SIRT1 is approximately 0.25 ng/lane under reducing conditions.</p> <p>Notes: Tested Species: Species with positive results.</p> <p>Other applications have not been tested. Optimal dilutions should be determined by end users.</p>
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## Application Details

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB.

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg Sodium azide.

Preservative: Sodium azide

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

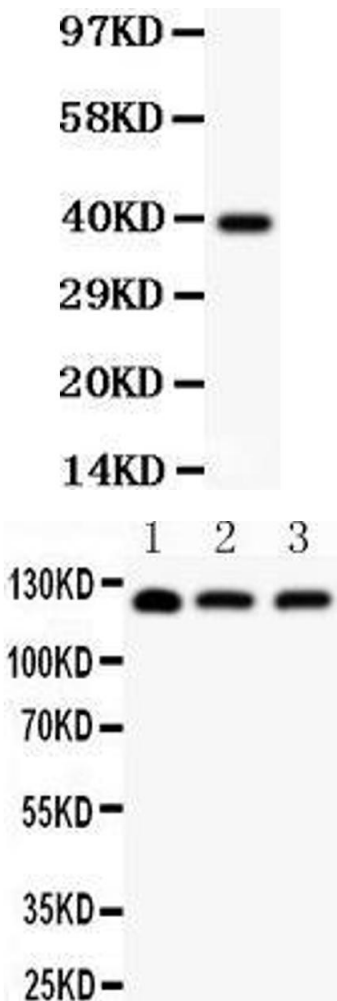
Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C/-20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.  
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

## Publications

Product cited in: Hou, Zheng, Li, Gao, Zhang: "The protective effect of glycyrrhizic acid on renal tubular epithelial cell injury induced by high glucose." in: **International journal of molecular sciences**, Vol. 15, Issue 9, pp. 15026-43, (2015) ([PubMed](#)).



Western Blotting

**Image 1.** Anti-SIRT1 Picoband antibody, All lanes: Anti SIRT1 at 0.5ug/ml WB: Recombinant Human SIRT1 Protein 0.5ng Predicted bind size: 39KD Observed bind size: 39KD

Western Blotting

**Image 2.** Anti-SIRT1 Picoband antibody, All lanes: Anti SIRT1 at 0.5ug/ml Lane 1: HEPG2 Whole Cell Lysate at 40ug Lane 2: MCF Whole Cell Lysate at 40ug Lane 3: SW620 Cell Lysate at 40ug Predicted bind size: 120KD Observed bind size: 120KD