

Rabbit anti-Human SIRT1 Polyclonal Antibody | anti-SIRT1 antibody

Anti-SIRT1 Antibody, Rabbit Polyclonal

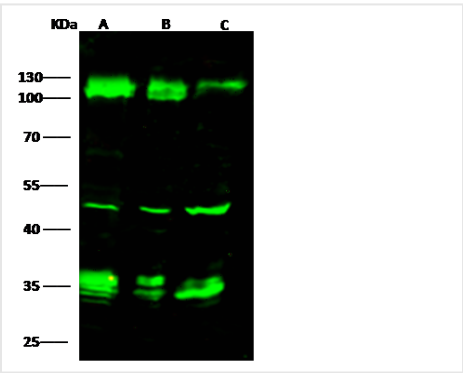
CATALOG # AAA255465	HOST Rabbit	REACTIVITY Human	APPLICATIONS Immunoprecipitation, Western Blot
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PRODUCT SYNONYMS

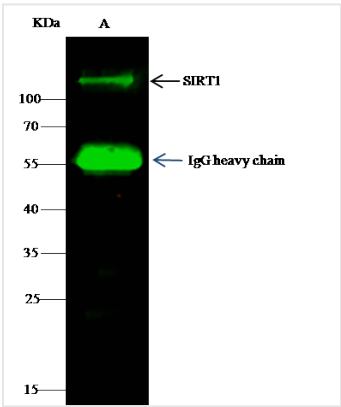
SIRT1; Polyclonal Antibody; Anti-SIRT1 Antibody; Rabbit Polyclonal; SIRT1 Antibody; Rabbit PAb; Antigen Affinity Purified; sirtuin 1; Anti-SIR2L1 Antibody; anti-SIRT1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human SIRT1
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-SIRT1 antibody	IP (Immunoprecipitation), WB (Western Blot)
Immunogen	Recombinant Human SIRT1 protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Human SIRT1 (rh SIRT1). SIRT1 specific IgG was purified by Human SIRT1 affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.



WB (Western Blot)
Anti-SIRT1 rabbit polyclonal antibody at 1:500 dilutionLane A: Jurkat Whole Cell LysateLane B: MCF7 Whole Cell LysateLane C: A549 Whole Cell LysateLysates/proteins at 30 ug per lane.SecondaryGoat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution.Developed using the Odyssey technique.Performed under reducing conditions.Predicted band size:81 kDaObserved band size:120 kDa(We are unsure as to the identity of these extra bands.



IP (Immunoprecipitation)
SIRT1 was immunoprecipitated using:Lane A:0.5 mg HepG2 Whole Cell Lysate2 uL anti-SIRT1 rabbit polyclonal antibody and 15 ul of 50 % Protein G agarose.Primary antibody:Anti-SIRT1 rabbit polyclonal antibody,at 1:200 dilutionSecondary antibody:Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilutionDeveloped using the odssey technique.Performed under reducing conditions.Predicted band size: 82 kDaObserved band size: 130 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-SIRT1 antibody	SIRT1 belongs to the sirtuin family. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. SIRT1 is included in class I of the sirtuin family. It is a NAD-dependent protein deacetylase, which regulates processes such as apoptosis and muscle differentiation by deacetylating key proteins. It deacetylates 'Lys-382' of p53/TP53 and impairs its ability to induce proapoptotic program and modulate cell senescence. SIRT1 also deacetylates TAF1B and thereby represses rDNA transcription by the RNA polymerase I. It is involved in HES1-and HEY2-mediated transcriptional repression. SIRT1 inhibits skeletal muscle differentiation by deacetylating PCAF and MYOD1. It may serve as a sensor of the cytosolic ratio of NAD(+)/NADH, which is essential in skeletal muscle cell differentiation. It also deacetylates 'Lys-16' of histone H4 (in vitro). Component of the eNoSC (energy-dependent nucleolar silencing) complex, a complex that mediates silencing of rDNA in response to intracellular energy status and acts by recruiting histone-modifying enzymes. The eNoSC complex is able to sense the energy status of cell: upon glucose starvation, elevation of NAD(+)/NADP(+) ratio activates SIRT1, leading to histone H3 deacetylation followed by dimethylation of H3 at 'Lys-9' (H3K9me2) by SUV39H1 and the formation of silent chromatin in the rDNA locus.
Product Categories/Family for anti-SIRT1 antibody	p53 Pathway
References	Sharma A, et al. (2012) Interactomic and pharmacological insights on human Sirt-1. Front Pharmacol. 3-40.Sun C, et al. (2007) SIRT1 improves insulin sensitivity under insulin-resistant conditions by repressing PTP1B. Cell Metab. 6(4):307-19.Rodgers JT, et al. (2005) Nutrient control of glucose homeostasis through a complex of PGC-1alpha and SIRT1. Nature. 434(7029):113-8.Nemoto S, et al. (2005) SIRT1 functionally interacts with the metabolic regulator and transcriptional coactivator PGC-1{alpha}. J Biol Chem. 280(16):16456-60.

NCBI AND UNIPROT INFORMATION

NCBI GI #	7657575
NCBI GeneID	23411
NCBI Accession #	NP_036370.2
NCBI GenBank Nucleotide #	NM_012238.4
UniProt Accession #	Q96EB6; Q2XNF6; Q5JVVQ; Q9GZR9; Q9Y6F0
Molecular Weight	61,066 Da
NCBI Official Full Name	NAD-dependent protein deacetylase sirtuin-1 isoform a

NCBI Official Synonym Full Names	sirtuin 1
NCBI Official Symbol	SIRT1
NCBI Official Synonym Symbols	SIR2L1
NCBI Protein Information	NAD-dependent protein deacetylase sirtuin-1; hSIR2; hSIRT1; SIR2alpha; sir2-like 1; sirtuin type 1; SIR2-like protein 1; regulatory protein SIR2 homolog 1; NAD-dependent deacetylase sirtuin-1
UniProt Protein Name	NAD-dependent protein deacetylase sirtuin-1
UniProt Gene Name	SIRT1
UniProt Synonym Gene Names	SIR2L1; hSIRT1; hSIR2; 75SirT1
UniProt Entry Name	SIR1_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/sirt1-antibody-immunoprecipitation-western-blot-elisa/255465>