

## Basic Information

Product Name	Anti-SIRT1 Antibody	
Gene Name	SIRT1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, ICC/IF, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E. coli-derived human SIRT1 recombinant protein (Position: Y142-H533). Human SIRT1 shares 96.9% and 99.4% amino acid (aa) sequence identity with mouse and rat SIRT1, respectively.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	110-120 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Enzyme linked immunosorbent assay (ELISA): 1:100-1000	

## Storage

12 months from date of receipt, -20°C as supplied.

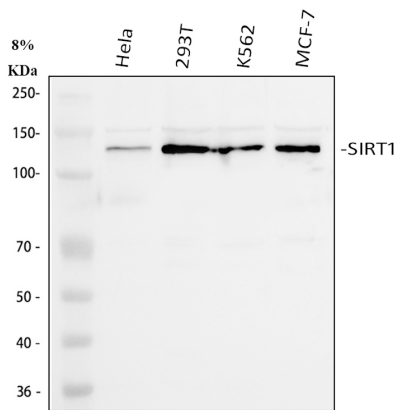
## Background Information

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 *S. cerevisiae*. 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.

## Reference

Anti-SIRT1 Antibody被引用在17文献中。

## Selected Validation Data



Western blot analysis of SIRT1 using anti-SIRT1 antibody (A00018-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

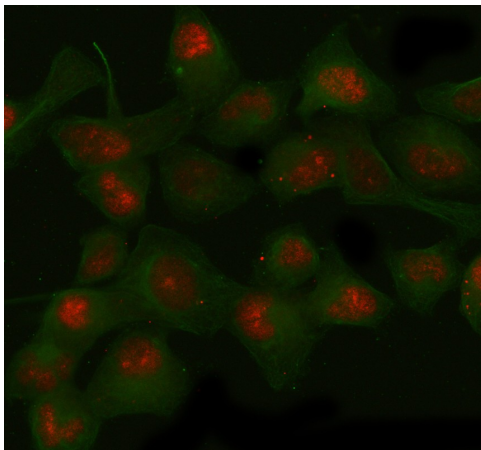
Lane 1: human HeLa whole cell lysates,

Lane 2: human 293T whole cell lysates,

Lane 3: human K562 whole cell lysates,

Lane 4: human MCF-7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-SIRT1 antigen affinity purified polyclonal antibody (A00018-1) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for SIRT1 at approximately 120 kDa. The expected band size for SIRT1 is at 82 kDa.



IF analysis of SIRT1 using anti-SIRT1 antibody (A00018-1) and anti-Beta Tubulin antibody (M01857-3).

SIRT1 was detected in an immunocytochemical section of HeLa cells. The section was incubated with rabbit anti-SIRT1 Antibody (A00018-1) at a dilution of 1:100. Cy3-Conjugated Anti-rabbit IgG Secondary Antibody (Red) (Catalog # BA1032) and Dylight488-conjugated Anti-mouse IgG Secondary Antibody (Green) (Catalog # BA1126) were used as secondary antibody.