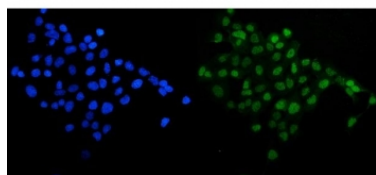


## SIRT1 Antibody (R31578)

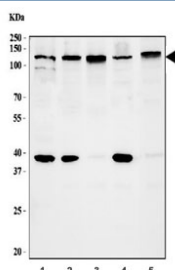
Catalog No.	Formulation	Size
R31578	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Antigen affinity purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity
<b>Buffer</b>	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
<b>UniProt</b>	Q96EB6
<b>Localization</b>	Cytoplasm, Mitochondrion and Nucleus
<b>Applications</b>	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml
<b>Limitations</b>	This SIRT1 antibody is available for research use only.



Immunofluorescent staining of FFPE human A431 cells with SIRT1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HepG2, 2) MCF7, 3) SiHA, 4) Daudi and 5) K562 cell lysate with SIRT1 antibody. Expected molecular weight: 82-120 kDa depending on glycosylation level.

## Description

Sirtuin 1, also known as SIR2L1, is a protein that in humans is encoded by the SIRT1 gene. Sirtuin 1 is a member of the sirtuin family of proteins, homologs of the Sir2 gene in *S. cerevisiae*. Family members 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, SIRT1 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.

## Application Notes

The stated application concentrations are suggested starting points. Titration of the SIRT1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

Human partial recombinant protein (AA 112-311) was used as the immunogen for this SIRT1 antibody.

## Storage

After reconstitution, the SIRT1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.