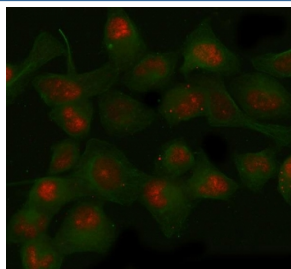


## SIRT1 Antibody / Sirtuin 1 (RQ5549)

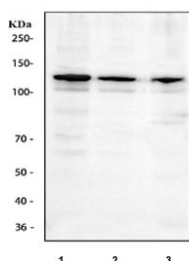
| Catalog No. | Formulation   | Size   |
|-------------|---|--------|
| RQ5549      | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

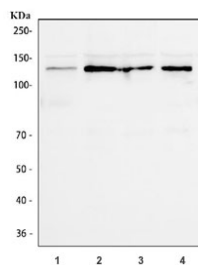
|                           |  |
|---------------------------|--|
| <b>Availability</b>       | 1-3 business days  |
| <b>Species Reactivity</b> | Human  |
| <b>Format</b>             | Antigen affinity purified  |
| <b>Clonality</b>          | Polyclonal (rabbit origin)   |
| <b>Isotype</b>            | Rabbit IgG   |
| <b>Purity</b>             | Affinity purified  |
| <b>Buffer</b>             | Lyophilized from 1X PBS with 2% Trehalose  |
| <b>UniProt</b>            | Q96EB6   |
| <b>Localization</b>       | Nuclear, cytoplasmic   |
| <b>Applications</b>       | Western Blot : 0.25-0.5ug/ml<br>Immunofluorescence : 5ug/ml<br>Direct ELISA : 0.1-0.5ug/ml |
| <b>Limitations</b>        | This SIRT1 antibody is available for research use only.                                    |



Immunofluorescent staining of FFPE human HeLa cells with SIRT1 antibody (red) and Beta Tubulin mAb (green). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



Western blot testing of human 1) SiHa, 2) A549 and 3) Caco-2 cell lysate with SIRT1 antibody. Predicted molecular weight ~80 kDa but is routinely observed at 110~120 kDa due to post-translational modification.



Western blot testing of human 1) HeLa, 2) 293T, 3) K562 and 4) MCF7 cell lysate with SIRT1 antibody. Predicted molecular weight ~80 kDa but is routinely observed at 110~120 kDa due to post-translational modification.

## Description

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.

## Application Notes

Optimal dilution of the SIRT1 antibody should be determined by the researcher.

## Immunogen

A human recombinant protein (amino acids Y142-H533) was used as the immunogen for the 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.