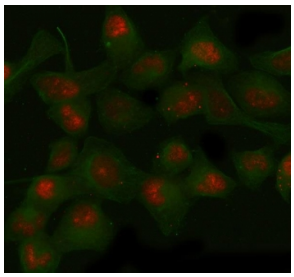
SIRT1 Antibody / Sirtuin 1 (RQ5549)

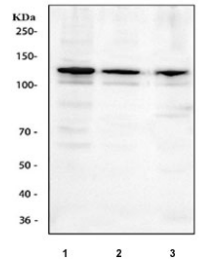
Catalog No.	Formulation	Size
RQ5549	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

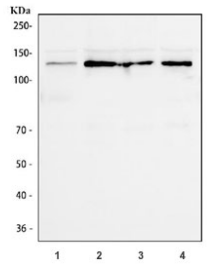
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q96EB6
Localization	Nuclear, cytoplasmic
Applications	Western Blot : 0.25-0.5ug/ml Immunofluorescence : 5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	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.

Researchers studying metabolic signaling, chromatin regulation, and cellular stress-response pathways may also be interested in our SIRT1 Antibody / Metabolic Stress Regulator page featuring validated immunofluorescence, flow cytometry, and protein microarray specificity data for energy-responsive signaling research.

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 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com