

SIRT6 Rabbit mAb

Catalog No: #49237

Package Size: #49237-1 50ul #49237-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

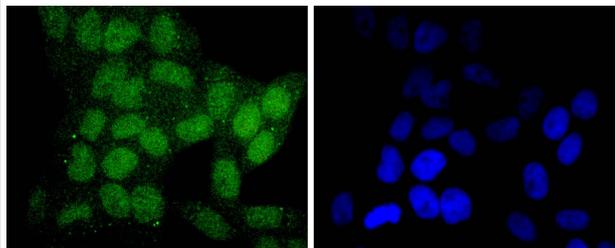
Description

Product Name	SIRT6 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JJ20-69
Purification	ProA affinity purified
Applications	WB, ICC/IF, FC
Species Reactivity	Hu
Immunogen Description	recombinant protein
Other Names	2810449N18Rik antibody AI043036 antibody Mono ADP ribosyltransferase sirtuin 6 antibody NAD-dependent protein deacetylase sirtuin-6 antibody Regulatory protein SIR2 homolog 6 antibody Regulatory protein SIR2 homolog antibody SIR2 like 6 antibody SIR2 like protein 6 antibody Sir2 related protein type 6 antibody SIR2-like protein 6 antibody SIR2L6 antibody SIR6_HUMAN antibody SIRT 6 antibody SIRT6 antibody Sirtuin (silent mating type information regulation 2 homolog) 6 (S. cerevisiae) antibody Sirtuin 6 antibody Sirtuin type 6 antibody Sirtuin6 antibody
Accession No.	Swiss-Prot#:Q8N6T7
Calculated MW	39 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

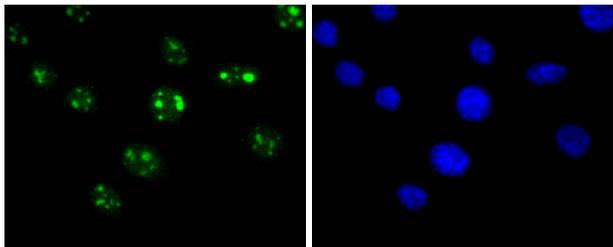
Application Details

WB: 1:1,000 ICC: 1:50-1:200 FC: 1:50-1:100

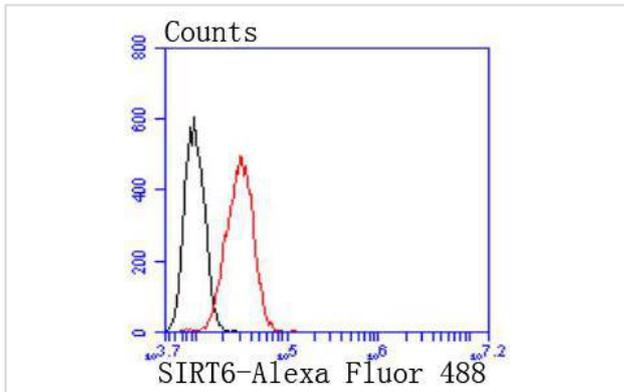
Images



ICC staining SIRT6 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining SIRT6 in NIH/3T3 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of HeLa cells with SIRT6 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody

Background

The Silent Information Regulator (Sir2) family of genes is a highly conserved group of genes that encode nicotinamide adenine dinucleotide (NAD)-dependent protein deacetylases, also known as class III histone deacetylases. The first discovered and best characterized of this family is *Saccharomyces cerevisiae* Sir2, which is involved in silencing of mating type loci, telomere maintenance, DNA damage response, and cell aging. SirT6, a mammalian homolog of Sir2, is a nuclear, chromatin-associated protein that promotes the normal maintenance of genome integrity mediated by the base excision repair (BER) pathway. The BER pathway repairs single-stranded DNA lesions that arise spontaneously from endogenous alkylation, oxidation, and deamination events. SirT6 deficient mice show increased sensitivity to DNA-damaging agents, including the alkylating agents MMS and H₂O₂. In addition, these mice show genome instability with increased frequency of fragmented chromosomes, detached centromeres, and gaps. SirT6 may regulate the BER pathway by deacetylating DNA Pol β or other core components of the pathway.

References

1. Zhang ZQ et al. Epigenetic regulation of NKG2D ligands is involved in exacerbated atherosclerosis development in *Sirt6* heterozygous mice. *Sci Rep* 6:23912 (2016).
2. Kim TH et al. Psammaphin A induces Sirtuin 1-dependent autophagic cell death in doxorubicin-resistant MCF-7/adr human breast cancer cells and xenografts. *Biochim Biophys Acta* 1850:401-10 (2015).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.