

SIRT2 (NT) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat SIRT2 (NT)

Instruction Manual

Catalog Number	PK-AB718-4487
Synonyms	SIRT2 Antibody: NAD-dependent deacetylase sirtuin-2, SIR2L, SIR2L2, SIR2-like
Description	Autophagy, the process of bulk degradation of cellular proteins through an autophagosomal-lysosomal pathway is important for normal growth control and may be defective in tumor cells. It is involved in the preservation of cellular nutrients under starvation conditions as well as the normal turnover of cytosolic components. This process is negatively regulated by TOR (Target of rapamycin) through phosphorylation of autophagy protein APG1. ATG16, another member of the autophagy protein family, forms a complex with the ATG5-ATG12 conjugate. This multimeric protein has been shown to be essential for autophagosome formation in both yeast and mammals and targets the ATG5-ATG12 complex to the autophagic isolation membrane during the formation of the autophagosome. Because mammalian ATG16 has seven WD-repeats in its C-terminal domain, it has been suggested that these may form a platform for further protein-protein interactions. Multiple isoforms of ATG16 are known to exist.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	SIRT2 antibody was raised in rabbits against a 17 amino acid peptide near the amino terminus of the human SIRT2.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC, IF Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. SIRT2 antibody can be used for detection of SIRT2 by Western blot at 2.5 - 5 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.
Images	Available upon request.
References	Yamamoto H, Schoonjans K, and Auwerx J. Sirtuin functions in health and disease. <i>Mol. Endocrinol.</i> 2007; 21:1745-55. Frye RA. Characterization of five human cDNAs with homology to the yeast SIR2 gene: SIR2-like proteins (sirtuins) metabolize NAD and may have protein ADP-ribosyltransferase activity. <i>Biochem. Biophys. Res. Commun.</i> 1999; 260:273-279. North BJ, Marshall BL, Borra MT, et. al. The human Sir2 ortholog, SIRT2, is an NAD ⁺ -dependent tubulin deacetylase. <i>Mol. Cell.</i> 2003; 11:437-44. Inoue T, Hiratsuka M, Osaki M, et al. The molecular biology of mammalian SIRT proteins: SIRT2 in cell cycle regulation. <i>Cell Cycle</i> 2007; 6:1011-8.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4487P; SIRT2 Peptide Cat.No. PK-AB718-1303; Human Brain Tissue Lysate

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