

Product name:	SIRT2 Rabbit Polyclonal Antibody
Cat number:	ABN17917
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human SIRT2. AA range:321-370
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
Molecular Weight:	43kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. The protein encoded by this gene is included in class I of the sirtuin family. Several transcript variants are resulted from alternative splicing of this gene. [provided by RefSeq, Jul 2010], catalytic activity: NAD(+) + an acetylprotein = nicotinamide + O-acetyl-ADP-ribose + a protein., cofactor: Binds 1 zinc ion per subunit., developmental stage: Peaks during mitosis. After mitosis, it is probably degraded by the 26S proteasome., enzyme regulation: Inhibited by Sirtinol, A3 and M15 small molecules. Inhibited by nicotinamide., function: NAD-dependent deacetylase, which deacetylates the 'Lys-40' of alpha-tubulin. Involved in the control of mitotic exit in the cell cycle, probably via its role in the regulation of cytoskeleton. Despite some ability to deacetylate histones in vitro, it is unlikely in vivo., PTM: Phosphorylated at the G2/M transition of the cell cycle., similarity: Belongs to the sirtuin family., similarity: Contains 1 deacetylase sirtuin-type domain., subcellular location: Colocalizes with microtubules., subunit: Interacts with HDAC6, suggesting that these proteins belong to a large complex that deacetylate the cytoskeleton., tissue specificity: Widely expressed. Highly expressed in heart, brain and skeletal muscle, while it is weakly expressed in placenta and lung. Down-regulated in many gliomas suggesting that it may act as a tumor suppressor gene in human gliomas possibly through the regulation of microtubule network.,