Product name:	SIRT6 (10O9) Rabbit Monoclonal Antibody
Cat number:	MABN17919
Conjugate:	Unconjugated
Size:	100µL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	A synthetic peptide of human SIRT6
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:200,ICC/IF 1:100-1:200,IP 1:20-1:50
Molecular Weight:	39kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% BSA.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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. 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. NAD-dependent protein deacetylase involved in various processes including telomere maintenance and gene expression, and consequently has roles in genomic stability, cell senescence and apoptosis (PubMed:18337721, PubMed:19135889, PubMed:19625767, PubMed:21362626). Has very weak deacetylase activity and can bind NAD(+) in the absence of acetylated substrate (PubMed:21362626). Has deacetylase activity towards histone H3K9Ac and H3K56Ac (PubMed:19625767, PubMed:21362626). Modulates acetylation of histone H3 in telomeric chromatin during the S-phase of the cell cycle (PubMed:19625767). May also be required for the association of WRN with telomeres during S-phase and for normal telomere maintenance (PubMed:18337721). Deacetylates histone H3K9Ac at NF-kappa-B target promoters and may down-regulate the expression of a subset of NF-kappa- B target genes (PubMed:21362626). Deacetylation of nucleosomes interferes with RELA binding to target DNA (PubMed:19135889). Acts as a corepressor of the transcription factor Hif1a to control the expression of multiple glycolytic genes to regulate glucose homeostasis (By similarity). Required for normal IGF1 serum levels and normal glucose homeostasis (By similarity). Regulates the production of TNF protein (By similarity). Has a role in the regulation of life span (By similarity).