SIRT6 Rabbit mAb [Wig2]

Cat NO. :A62832

Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB	Human	Q8N6T7	39kDa	Rabbit	lgG	50ul,100ul,200ul

Applications detail:

Application	Dilution	
WB	1:1000-2000	
The optimal dilutions should be d	he optimal dilutions should be determined by the end user	

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Affinity-chromatography

Specificity:

Antibody is produced by immunizing animals with A synthesized peptide derived from human SIRT6

Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

Tissue specificity:

Subcellular location:

Nucleus. Chromosome. Chromosome, telomere. Endoplasmic reticulum.

Function:

NAD-dependent protein deacetylase, deacylase and mono-ADP-ribosyltransferase that plays an essential role in DNA damage repair, telomere maintenance, metabolic homeostasis, inflammation, tumorigenesis and aging (PubMed:18337721, PubMed:19135889, PubMed:19625767, PubMed:21680843, PubMed:23217706, PubMed:23653361, PubMed:24052263, PubMed:27322069, PubMed:27180906, PubMed:21362626, PubMed:23552949, PubMed:30374165, PubMed:29555651). Displays protein-lysine deacetylase or defattyacylase (demyristoylase and depalmitoylase) activity, depending on the context (PubMed:24052263, PubMed:27322069, PubMed:23552949). Acts as a key histone deacetylase by catalyzing deacetylation of histone

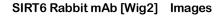
Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/ Immunofluorescence F: Flow Cytometry

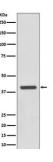
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse

For Research Use Only. Not For Use In Diagnostic Procedures.

H3 at 'Lys-9', 'Lys-18' and 'Lys-56' (H3K9ac, H3K18ac and H3K56ac, respectively), suppressing target gene expression of several transcription factors, including NF-kappa-B (PubMed:19625767, PubMed:24012758, PubMed:23892288, PubMed:23911928, PubMed:27043296, PubMed:26898756, PubMed:27180906, PubMed: 33067423, PubMed: 21362626, PubMed: 30374165, PubMed: 26456828). Acts as an inhibitor of transcription elongation by mediating deacetylation of H3K9ac and H3K56ac, preventing release of NELFE from chromatin and causing transcriptional pausing (By similarity). Involved in DNA repair by promoting double-strand break (DSB) repair: acts as a DSB sensor by recognizing and binding DSB sites, leading to (1) recruitment of DNA repair proteins, such as SMARCA5/SNF2H, and (2) deacetylation of histone H3K9ac and H3K56ac (PubMed:23911928, PubMed:31995034, PubMed:32538779). SIRT6 participation to DSB repair is probably involved in extension of life span (By similarity). Also promotes DNA repair by deacetylating non-histone proteins, such as DDB2 and p53/TP53 (PubMed:32789493, PubMed:29474172). Specifically deacetylates H3K18ac at pericentric heterochromatin, thereby maintaining pericentric heterochromatin silencing at centromeres and protecting against genomic instability and cellular senescence (PubMed:27043296). Involved in telomere maintenance by catalyzing deacetylation of histone H3 in telomeric chromatin, regulating telomere position effect and telomere movement in response to DNA damage (PubMed:18337721, PubMed:19625767, PubMed:21847107). Required for embryonic stem cell differentiation by mediating histone deacetylation of H3K9ac (PubMed:25915124, PubMed:29555651). Plays a major role in metabolism by regulating processes such as glycolysis, gluconeogenesis, insulin secretion and lipid metabolism (PubMed:24012758, PubMed:26787900). Inhibits glycolysis via histone deacetylase activity and by acting as a corepressor of the transcription factor HIF1A, thereby controlling the expression of multiple glycolytic genes (By similarity). Has tumor suppressor activity by repressing glycolysis, thereby inhibiting the Warburg effect (PubMed:23217706). Also regulates glycolysis and tumorigenesis by mediating deacetylation and nuclear export of non-histone proteins, such as isoform M2 of PKM (PKM2)

Validation Data:





Western blot (SDS PAGE) analysis of extracts from Jurkat cell lysate.Using SIRT6 Rabbit mAb [Wig2]at dilution of 1:1000 incubated at 4°C over night.

View more information on http://naturebios.com

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.