

SIRT2 Mouse mAb[IA25]

Cat NO. :A79340

Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC,ICC/IF	H,M,R	Q8IXJ6	45kda	Mouse	IgG	50ul 100ul,200ul

Applications detail:

Application	Dilution
WB	1:1000-2000
IHC	1:100
ICC/IF	1:100
The optimal dilutions should be determined by the end user	

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Protein A purification

Specificity:

Antibody is produced by immunizing animals with a synthetic peptide of human SIRT2.

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:

Isoform 1 is expressed in heart, liver and skeletal muscle, weakly expressed in the cortex. Isoform 2 is strongly expressed in the cortex, weakly expressed in heart and liver. Weakly expressed in

Subcellular location:

Nucleus. Cytoplasm, perinuclear region. Cytoplasm. Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, microtubule organizing center,

Function:

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

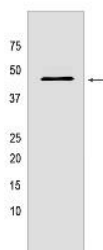
Cross Reactivity: **H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Ml:** mink **C:** chicken **Dm** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Hr:** horse

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NAD-dependent protein deacetylase, which deacetylates internal lysines on histone and alpha-tubulin as well as many other proteins such as key transcription factors (PubMed:24177535, PubMed:12620231, PubMed:16648462, PubMed:18249187, PubMed:18332217, PubMed:18995842, PubMed:20587414, PubMed:21081649, PubMed:20543840, PubMed:22014574, PubMed:21726808, PubMed:21949390, PubMed:22771473, PubMed:23468428, PubMed:23908241, PubMed:24940000, PubMed:24769394, PubMed:24681946). Participates in the modulation of multiple and diverse biological processes such as cell cycle control, genomic integrity, microtubule dynamics, cell differentiation, metabolic networks, and autophagy (PubMed:24177535, PubMed:12620231, PubMed:16648462, PubMed:18249187, PubMed:18332217, PubMed:18995842, PubMed:20587414, PubMed:21081649, PubMed:20543840, PubMed:22014574, PubMed:21726808, PubMed:21949390, PubMed:22771473, PubMed:23468428, PubMed:23908241, PubMed:24940000, PubMed:24769394, PubMed:24681946). Plays a major role in the control of cell cycle progression and genomic stability (PubMed:12697818, PubMed:17488717, PubMed:16909107, PubMed:17726514, PubMed:19282667, PubMed:23468428). Functions in the antephasis checkpoint preventing precocious mitotic entry in response to microtubule stress agents, and hence allowing proper inheritance of chromosomes (PubMed:12697818, PubMed:17488717, PubMed:16909107, PubMed:17726514, PubMed:19282667, PubMed:23468428). Positively regulates the anaphase promoting complex/cyclosome (APC/C) ubiquitin ligase complex activity by deacetylating CDC20 and FZR1, then allowing progression through mitosis (PubMed:22014574). Associates both with chromatin at transcriptional start sites (TSSs) and enhancers of active genes (PubMed:23468428). Plays a role in cell cycle and chromatin compaction through epigenetic modulation of the regulation of histone H4 'Lys-20' methylation (H4K20me1) during early mitosis (PubMed:23468428). Specifically deacetylates histone H4 at 'Lys-16' (H4K16ac) between the G2/M transition and metaphase enabling H4K20me1 deposition by KMT5A leading to ulterior levels of H4K20me2 and H4K20me3 deposition throughout cell cycle, and mitotic S-phase progression (PubMed:23468428). Deacetylates KMT5A modulating KMT5A chromatin localization during the mitotic stress response (PubMed:23468428). Deacetylates also histone H3 at 'Lys-57' (H3K56ac) during the mitotic G2/M transition (PubMed:20587414). Upon bacterium *Listeria monocytogenes* infection, deacetylates 'Lys-18' of histone H3 in a receptor tyrosine kinase MET- and PI3K/Akt-dependent manner, thereby inhibiting transcriptional activity and promoting late stages of listeria infection (PubMed:23908241). During oocyte meiosis progression, may deacetylate histone H4 at 'Lys-16' (H4K16ac) and alpha-tubulin, regulating spindle assembly and chromosome alignment by influencing microtubule dynamics and kinetochore function (PubMed:24940000). Deacetylates histone H4 at 'Lys-16' (H4K16ac) at the VEGFA

Validation Data:

SIRT2 Mouse mAb[IA25] Images



Western blot (SDS PAGE) analysis of extracts from MCF-7 cells. Using SIRT2 Mouse mAb IgG [IA25] at dilution of 1:1000 incubated at 4°C over night.

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