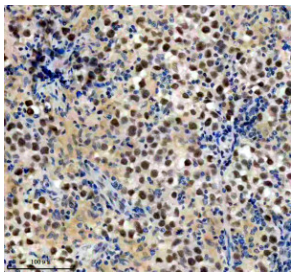
SIN3A Antibody ACEE-19 / mSin3A Monoclonal Antibody [clone ACEE-19] (FY13702)

Catalog No.	Formulation	Size
FY13702	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol	100 ul

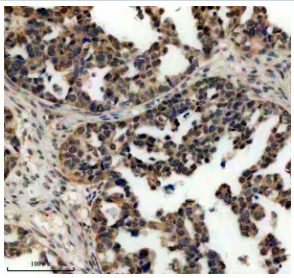
Recombinant RABBIT MONOCLONAL

Bulk quote request

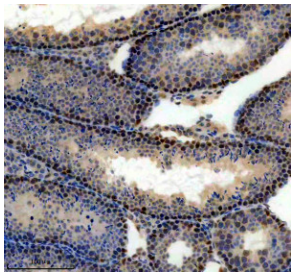
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	ACEE-19
Purity	Affinity purified
UniProt	Q96ST3
Applications	Western blot: 1:500 Immunohistochemistry (FFPE): 1:50
Limitations	This SIN3A Antibody ACEE-19 / mSin3A Monoclonal Antibody is available for research use only.



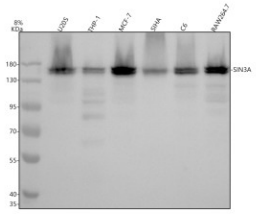
SIN3A Antibody ACEE-19 IHC Staining of Human Testis Cancer Tissue. Immunohistochemical analysis of paraffin-embedded human testis cancer tissue using mSin3A Monoclonal Antibody clone ACEE-19 at a 1:50 dilution. Prominent brown DAB nuclear immunoreactivity is observed in numerous tumor cells, with variable staining intensity across the section. Heat-induced antigen retrieval was performed using EDTA buffer at pH 8.0, followed by overnight primary antibody incubation at 4oC.



SIN3A Antibody ACEE-19 IHC Staining of Human Ovarian Cancer Tissue. Immunohistochemical analysis of paraffin-embedded human ovarian cancer tissue using mSin3A Monoclonal Antibody clone ACEE-19 at a 1:50 dilution. Heterogeneous brown DAB immunoreactivity is observed among tumor cells, including nuclear-associated and diffuse cellular staining. Heat-induced antigen retrieval was performed using EDTA buffer at pH 8.0, followed by overnight primary antibody incubation at 4oC.



SIN3A Antibody ACEE-19 IHC Staining of Mouse Testis Tissue. Immunohistochemical analysis of paraffin-embedded mouse testis tissue using mSin3A Monoclonal Antibody clone ACEE-19 at a 1:50 dilution. Brown DAB nuclear-associated immunoreactivity is observed in subsets of cells within the seminiferous tubules, with heterogeneous staining intensity. Heat-induced antigen retrieval was performed using EDTA buffer at pH 8.0, followed by overnight primary antibody incubation at 4oC.



SIN3A Antibody ACEE-19 WB Analysis of Human, Rat, and Mouse Cell Lysates. Western blot analysis of human U-2 OS (lane 1), THP-1 (lane 2), MCF-7 (lane 3), and SiHa (lane 4), rat C6 (lane 5), and mouse RAW264.7 (lane 6) whole-cell lysates using mSin3A Monoclonal Antibody clone ACEE-19. A prominent immunoreactive band is detected at approximately 150 kDa in all six samples, consistent with the reported observed molecular weight of SIN3A and its calculated molecular weight of 145.2 kDa. Signal intensity varies among cell lines, with particularly strong bands in MCF-7 and RAW264.7 lysates. Faint additional lower-molecular-weight bands are visible in selected lanes; their identities have not been established.

Description

SIN3A Antibody ACEE-19 / mSin3A Monoclonal Antibody recognizes SIN3A, a nuclear transcriptional corepressor that coordinates the assembly of multiprotein complexes involved in chromatin regulation and gene expression. Also known as mammalian Sin3A, this protein functions primarily as a molecular scaffold rather than an enzyme or sequence-specific DNA-binding factor. SIN3A associates with transcriptional regulators and recruits chromatin-modifying proteins to selected genomic regions, allowing cells to regulate transcription in response to developmental signals and changing physiological conditions.

A defining structural feature of SIN3A is its collection of paired amphipathic helix (PAH) domains, which provide interaction surfaces for numerous transcription factors. These include members of the MAD family and MXI1, proteins that participate in transcriptional repression within the MYC-MAX regulatory network. By interacting with MAD-MAX complexes, SIN3A helps establish transcriptional programs that oppose selected MYC-associated activities. SIN3A also participates in repression mediated by REST and other DNA-binding regulatory proteins, demonstrating its ability to coordinate diverse transcriptional pathways.

SIN3A-containing complexes commonly incorporate histone deacetylases HDAC1 and HDAC2, together with additional proteins that influence chromatin structure and complex stability. Histone deacetylation can reduce chromatin accessibility and contribute to transcriptional repression, although the biological effects of these complexes depend on their composition and genomic location. SIN3A-associated proteins also participate in regulatory mechanisms extending beyond histone modification, including interactions that influence transcription factor activity and cellular responses to stress.

SIN3A contributes to embryonic development, cell cycle control, differentiation, and the maintenance of specialized cellular identities. Altered SIN3A function can disrupt coordinated gene expression and has been implicated in developmental abnormalities and cancer-associated transcriptional changes. Its biological activities depend on the proteins recruited to individual regulatory complexes, making SIN3A an important component of context-dependent gene regulation. SIN3A Antibody ACEE-19 supports investigations of mSin3A protein expression and the molecular interactions connecting transcriptional repression, chromatin organization, and cellular differentiation.

For studies requiring broader application coverage, see our mSin3A Antibody, a rabbit polyclonal antibody validated for WB, IHC, IF, and FACS.

Application Notes

Optimal dilution of the SIN3A Antibody ACEE-19 / mSin3A Monoclonal Antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Paired amphipathic helix protein Sin3a was used as the immunogen for the SIN3A Antibody ACEE-19.

Storage

The SIN3A Antibody ACEE-19 can be stored at -20oC.

Alternate Names

mSin3A antibody, Sin3 homolog A antibody, SIN3 transcription regulator homolog A antibody, paired amphipathic helix protein Sin3A antibody, transcriptional corepressor SIN3A antibody, SIN3A HDAC complex antibody

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