

Rabbit SIN3A Polyclonal Antibody | anti-SIN3A antibody

SIN3A Antibody

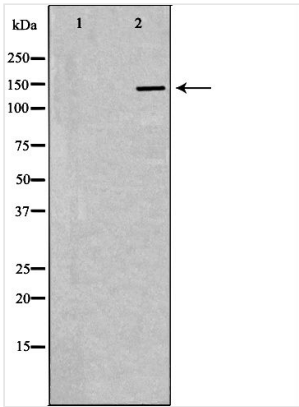
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326241	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

SIN3A; Polyclonal Antibody; SIN3A Antibody; AW553200; DKFZP434K2235; FLJ90319; Histone deacetylase complex subunit Sin 3a; Histone deacetylase complex subunit Sin3a; KIAA0700; Kiaa4126; mKIAA4126; Paired amphipathic helix protein Sin 3a; Paired amphipathic helix protein Sin3a; Sin 3a; SIN3 homolog A; SIN3 homolog A transcription regulator (yeast); SIN3 homolog A transcription regulator; SIN3 transcription regulator homolog A; Sin3a; SIN3A protein; SIN3A_HUMAN; Transcriptional co repressor Sin 3A; Transcriptional co repressor Sin3A; Transcriptional corepressor Sin3a; Transcriptional regulator SIN3A; anti-SIN3A antibody

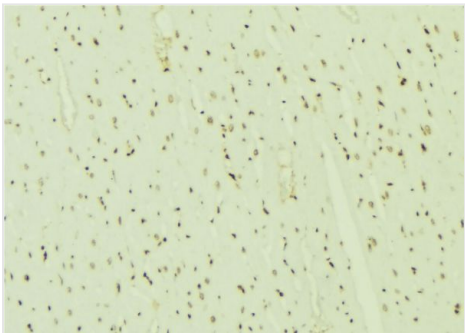
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	SIN3A antibody detects endogenous levels of total SIN3A
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1273
Applicable Applications for anti-SIN3A antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human SIN3A
Subcellular Location	Nucleus. Nucleus > Nucleolus. Recruited to the nucleolus by SAP30L.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)

Western blot analysis of Hela cell lysate, using SIN3A Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326241 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-SIN3A antibody

Description: SIN3 was originally identified as a negative regulator of transcription in budding yeast (1, 2). Since then, three isoforms of the SIN3 proteins have been identified in mammalian cells, as products of two different genes, SIN3A and SIN3B (3, 4). Both SIN3A and SIN3B are nuclear proteins that function as scaffolding subunits for the multi-subunit SIN3 transcriptional repressor complex, containing SIN3A or SIN3B, HDAC1, HDAC2, SDS3, RBBP4/RBAP48, RBBP7/RBAP46, SAP30, and SAP18 (3, 4). SIN3 proteins contain four paired amphipathic alpha-helix (PAH) motifs that function in the recruitment of the SIN3 complex to target genes by binding a multitude of DNA-binding transcriptional repressor proteins, including Mad1, p53, E2F4, HCF-1, AML1, Elk-1, NRSF, CTCF, ERalpha, and MeCP2 (3, 4). In addition, SIN3 proteins contain an HDAC interaction domain (HID), which mediates binding of HDAC1 and HDAC2 via the SDS3 bridging protein, and a highly conserved region (HCR) at the carboxy terminus, which contributes to repressor protein binding (3, 4). RBBP4 and RBBP7 proteins also bind to SDS3 and contribute to nucleosome binding of the complex. The SIN3 complex functions to repress transcription, in part, by deacetylating histones at target gene promoters (3, 4). In addition, recent studies have shown that SIN3 is recruited to the coding regions of repressed and active genes, where it deacetylates histones and suppresses spurious transcription by RNA polymerase II (3, 5). In addition to histone deacetylase activity, the SIN3 complex associates with histone methyltransferase (ESET), histone demethylase (JARID1A/RBP2), ATP-dependent chromatin remodeling (SWI/SNF), methylcytosine dioxygenase (TET1), and O-GlcNAc transferase (OGT) activities, all of which appear to contribute to the regulation of target genes (5-9). The SIN3 complex is critical for proper regulation of embryonic development, cell growth and proliferation, apoptosis, DNA replication, DNA repair, and DNA methylation (imprinting and X-chromosome inactivation) (3, 4).

Function: Acts as a transcriptional repressor. Corepressor for REST. Interacts with MXI1 to repress MYC responsive genes and antagonize MYC oncogenic activities. Also interacts with MXD1-MAX heterodimers to repress transcription by tethering SIN3A to DNA. Acts cooperatively with OGT to repress transcription in parallel with histone deacetylation. Involved in the control of the circadian rhythms. Required for the transcriptional repression of circadian target genes, such as PER1, mediated by the large PER complex through histone deacetylation. Cooperates with FOXK1 to regulate cell cycle progression probably by repressing cell cycle inhibitor genes expression (By similarity). Subunit Structure: Interacts with ARID4B, BRMS1L, HCFC1, HDAC1, HDAC2, MXI1, SAP30L, SAP130, SFPQ and TOPORS. Interacts with OGT (via TPRs 1-6); the interaction mediates transcriptional repression in parallel with histone deacetylase (By similarity). Interacts with BAZ2A, MXD3, MXD4, MBD2, DACH1, NCOR1, NR4A2, REST, RLIM, SAP30, SETDB1, SMYD2, and SUDS3. Interacts with PHF12 in a complex composed of HDAC1, PHF12 and SAP30. Interacts with TET1; the interaction recruits SIN3A to gene promoters. The large PER complex involved in the histone deacetylation is composed of at least HDAC1, PER2, SFPQ and SIN3A. Interacts with KLF11 (By similarity). Interacts with PPHLN1 (PubMed:17963697). Found in a complex with YY1, GON4L and HDAC1 (By similarity). Interacts (via PAH2) with FOXK1 (By similarity). Found in a complex composed of at least SINHCAF, SIN3A, HDAC1, SAP30, RBBP4, OGT and TET1. Interacts with SINHCAF (By similarity).

Post-translational Modifications: SUMO1 sumoylated by TOPORS. Probably desumoylated by SENP2.

NCBI AND UNIPROT INFORMATION

NCBI GI #	223941782
NCBI GeneID	25942

NCBI Accession #	NP_001138829.1
NCBI GenBank Nucleotide #	NM_001145357.1
UniProt Accession #	Q96ST3 ; Q8N8N4 ; Q8NC83 ; Q8WV18 ; Q96L98 ; Q9UFQ1 ; B2RNS5
Molecular Weight	Observed: 145 kDa Predicted: 146 kDa
NCBI Official Full Name	paired amphipathic helix protein Sin3a
NCBI Official Synonym Full Names	SIN3 transcription regulator family member A
NCBI Official Symbol	SIN3A
NCBI Official Synonym Symbols	WITKOS
NCBI Protein Information	paired amphipathic helix protein Sin3a
UniProt Protein Name	Paired amphipathic helix protein Sin3a
UniProt Gene Name	SIN3A

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/sin3a-antibody-immunohistochemistry-western-blot-elisa/326241>