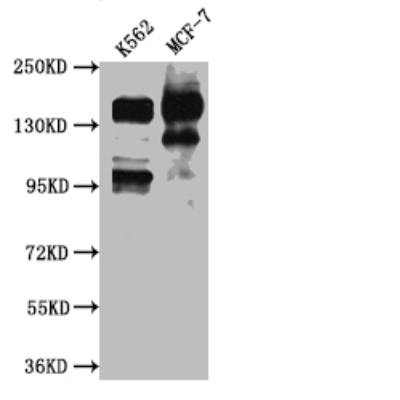
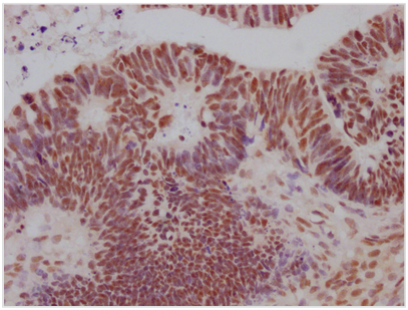
SIN3A Antibody

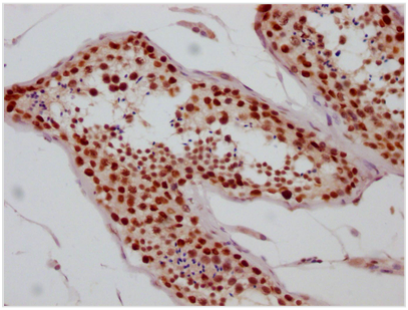
Product Code	CSB-RA242724A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q96ST3
Immunogen	A synthesized peptide derived from human mSin3A
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, IF; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200
Relevance	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 he 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).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Cancer; Metabolism
Gene Names	SIN3A
Accession NO.	10G3
Image	



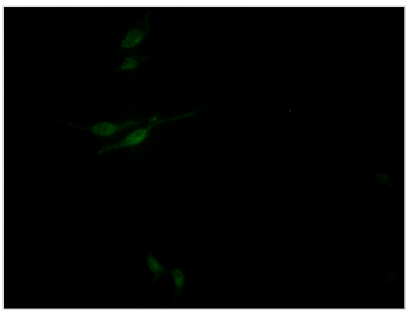
Western Blot
Positive WB detected in: K562 whole cell lysate, MCF-7 whole cell lysate
All lanes: mSin3A antibody at 1:1000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 146 kDa
Observed band size: 146 kDa



IHC image of CSB-RA242724A0HU diluted at 1:100 and staining in paraffin-embedded human ovarian cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA242724A0HU diluted at 1:100 and staining in paraffin-embedded human testis tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of HepG2 Cells with CSB-RA242724A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

SIN3A is the central scaffold protein of the SIN3/histone deacetylase (HDAC) transcriptional repressor complex that plays important role in early embryonic development. SIN3A, as the complex's master scaffold protein, does not have DNA binding capabilities, but it can regulate chromatin shape and gene expression by recruiting other epigenetic components such as HDAC1, HDAC2, and Ten–eleven translocation 1 (Tet1). The SIN3A–HDAC complex has also

been discovered to be essential for the proliferation of embryonic stem cells (ESCs) in self-renewing circumstances. SIN3A is also involved in the control of the cell cycle. SIN3A knockdown by RNAi causes a G2 arrest in S2 cells in Drosophila.

The recombinant SIN3A antibody expression is induced in mammalian cells transfected with a recombinant plasma vector. The recombinant plasma vector was constructed by inserting the gene coding for the antibody against SIN3A into the plasma. The recombinant SIN3A antibody was purified from the cell culture medium using Affinity-chromatography. It can react with samples containing SIN3A protein from Human and has been validated for use in the ELISA, WB, IHC, IF.