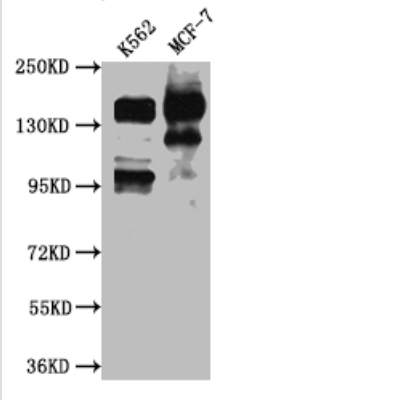
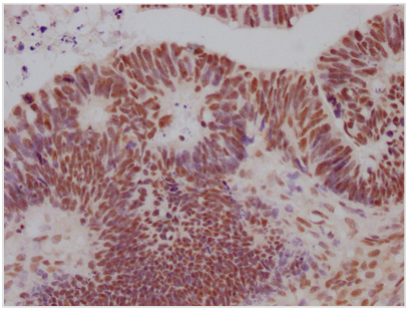
SIN3A Recombinant Monoclonal Antibody

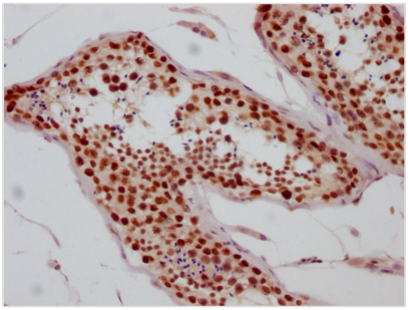
Product Code	CSB-RA242724A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q96ST3
Immunogen	A synthesized peptide derived from human mSin3A
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, IF; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200
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
Clone No.	10G3
Image	



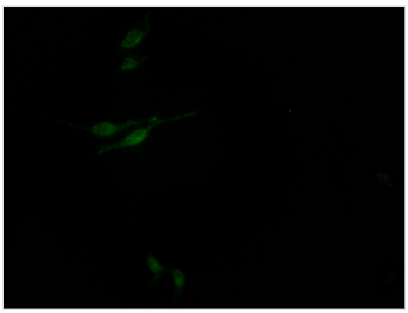
Western Blot
Positive WB detected in: K562 whole cell lysate, MCF-7 whole cell lysate
All lanes: mSin3A antibody at 1:1000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 146 kDa
Observed band size: 146 kDa



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? 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? 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?. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

The SIN3A recombinant monoclonal antibody has been tested in ELISA, WB, IHC, and IF applications for the reactivity with human SIN3A protein. Its production includes the synthesis of the SIN3A monoclonal antibody gene, construction of the SIN3A monoclonal antibody gene-carrying vector, and transfection of the recombinant vector into cells for culture. A synthesized peptide derived from human SIN3A is used as the immunogen during the SIN3A

monoclonal antibody generation. The resulting SIN3A recombinant monoclonal antibody is purified using affinity chromatography from the cell culture supernatant.

The SIN3A protein is a transcriptional regulator that plays a role in gene silencing, gene activation, and DNA repair. In addition to its role in gene regulation, SIN3A has been implicated in various cellular processes, such as DNA replication, chromatin structure maintenance, and cell cycle progression. It is also involved in the development of different tissues and organs, including the nervous system, heart, and muscle. Dysfunction of the SIN3A protein has been associated with several diseases, including cancer, neurodevelopmental disorders, and cardiovascular diseases.