

# Rabbit Anti-SIAH1 antibody

# SL3596R

Product Name:	SIAH1
Chinese Name:	Ubiquitin连接酶Siah1抗体
Alias:	hSIAH1; HUMSIAH; Seven in absentia homolog 1 (Drosophila); Seven in absentia homolog 1; Siah 1; Siah 1a; Ubiquitin ligase SIAH1; E3 ubiquitin-protein ligase SIAH1; Seven in absentia homolog 1; Siah-1; Siah-1a; Siah E3 ubiquitin protein ligase 1; SIAH1_HUMAN; SIAH1A.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	34kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SIAH1:201-282/282
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	This gene encodes a protein that is a member of the seven in absentia homolog (SIAH) family. The protein is an E3 ligase and is involved in ubiquitination and proteasome-mediated degradation of specific proteins. The activity of this ubiquitin ligase has been implicated in the development of certain forms of Parkinson's disease, the regulation of

the cellular response to hypoxia and induction of apoptosis. Alternative splicing results in several additional transcript variants, some encoding different isoforms and others that have not been fully characterized.

#### Function:

E3 ubiquitin-protein ligase that mediates ubiquitination and subsequent proteasomal degradation of target proteins. E3 ubiquitin ligases accept ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Mediates E3 ubiquitin ligase activity either through direct binding to substrates or by functioning as the essential RING domain subunit of larger E3 complexes. Triggers the ubiquitin-mediated degradation of many substrates, including proteins involved in transcription regulation (MYB, POU2AF1, PML and RBBP8), a cell surface receptor (DCC), the cell-surface receptor-type tyrosine kinase FLT3, the cytoplasmic signal transduction molecules (KLF10/TIEG1 and NUMB), an antiapoptotic protein (BAG1), a microtubule motor protein (KIF22), a protein involved in synaptic vesicle function in neurons (SYP), a structural protein (CTNNB1) and SNCAIP. Confers constitutive instability to HIPK2 through proteasomal degradation. It is thereby involved in many cellular processes such as apoptosis, tumor suppression, cell cycle, axon guidance, transcription regulation, spermatogenesis and TNF-alpha signaling. Has some overlapping function with SIAH2. Induces apoptosis in cooperation with PEG3. Upon nitric oxid (NO) generation that follows apoptotic stimulation, interacts with S-nitrosylated GAPDH, mediating the translocation of GAPDH to the nucleus. GAPDH acts as a stabilizer of SIAH1, facilitating the degradation of nuclear proteins.

#### **Subcellular Location:**

Cytoplasm. Nucleus. Predominantly cytoplasmic. Partially nuclear.

### **Tissue Specificity:**

Widely expressed at a low level. Down-regulated in advanced hepatocellular carcinomas.

#### **Post-translational modifications:**

Phosphorylated on Ser-19 by ATM and ATR. This phosphorylation disrupts SIAH1 interaction with HIPK2, and subsequent proteasomal degradation of HIPK2.

#### Similarity:

Belongs to the SINA (Seven in absentia) family.

Contains 1 RING-type zinc finger.

Contains 1 SIAH-type zinc finger.

#### **SWISS:**

Q8IUQ4

#### Gene ID:

6477

#### Database links:

Entrez Gene: 534655Cow

Entrez Gene: 6477Human

Entrez Gene: 20437 Mouse

Entrez Gene: 140941Rat

Omim: 602212Human

SwissProt: Q8IUQ4Human

SwissProt: P61092Mouse

SwissProt: Q920M9Rat

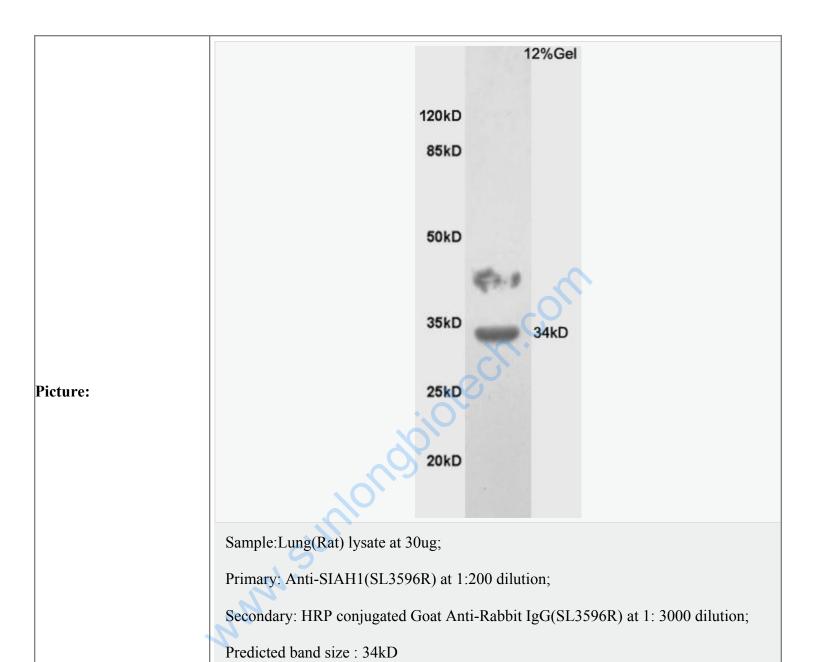
Unigene: 706828Human

Unigene: 713615Human

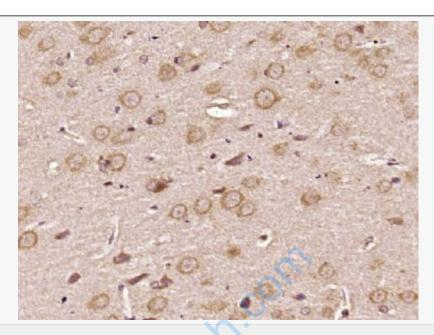
Unigene: 73937Rat

## **Important Note:**

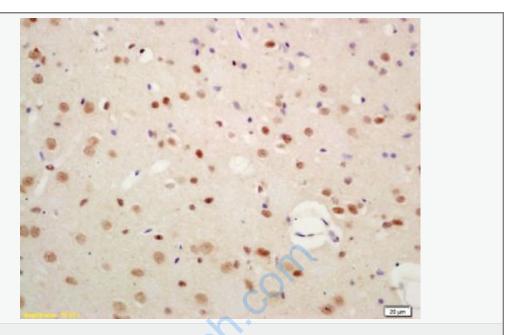
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Observed band size: 34kD



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SIAH1) Polyclonal Antibody, Unconjugated (SL3596R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-SIAH1 Polyclonal Antibody, Unconjugated(SL3596R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining