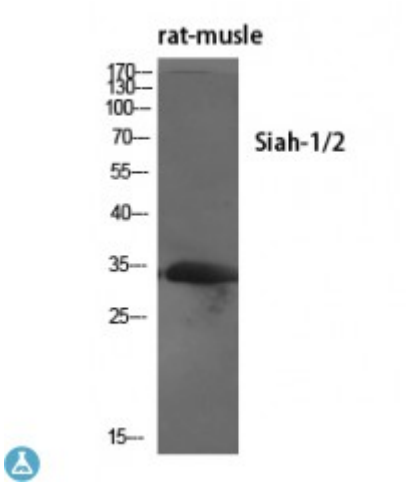
Anti-Siah-1/2 antibody



Description	Rabbit polyclonal to Siah-1/2.

Model	STJ95661
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human Siah-1/2
Immunogen Region	160-240 aa, Internal
Gene ID	6477
Gene Symbol	SIAH1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000
Specificity	Siah-1/2 Polyclonal Antibody detects endogenous levels of Siah-1/2 protein.
Tissue Specificity	Widely expressed at a low level. Down-regulated in advanced hepatocellular carcinomas.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	E3 ubiquitin-protein ligase SIAH1 RING-type E3 ubiquitin transferase SIAH1 Seven in absentia homolog 1 Siah-1 Siah-1a
Molecular Weight	34 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:10857OMIM:602212
Alternative Names	E3 ubiquitin-protein ligase SIAH1 RING-type E3 ubiquitin transferase SIAH1 Seven in absentia homolog 1 Siah-1 Siah-1a
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 (ELL2, 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.
Sequence and Domain Family	The RING-type zinc finger domain is essential for ubiquitin ligase activity.; The SBD domain (substrate-binding domain) mediates the homodimerization and the interaction with substrate proteins. It is related to the TRAF family.
Cellular Localization	Cytoplasm. Nucleus. Predominantly cytoplasmic. Partially nuclear.
Post-translational Modifications	Phosphorylated on Ser-19 by ATM and ATR. This phosphorylation disrupts SIAH1 interaction with HIPK2, and subsequent proteasomal degradation of HIPK2.