

Anti-SIAH2 Antibody

Rabbit polyclonal antibody to SIAH2 Catalog # AP60394

Specification

Anti-SIAH2 Antibody - Product Information

Application WB, IF
Primary Accession Other Accession Q06986

Reactivity
Host
Clonality
Human, Mouse, Rat, Zebrafish
Rabbit
Polyclonal

Calculated MW 34615

Anti-SIAH2 Antibody - Additional Information

Gene ID 6478

Other Names

E3 ubiquitin-protein ligase SIAH2; Seven in absentia homolog 2; Siah-2; hSiah2

Target/Specificity

Recognizes endogenous levels of SIAH2 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500) IF~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-SIAH2 Antibody - Protein Information

Name SIAH2

Function

E3 ubiquitin-protein ligase that mediates ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:11483518, PubMed:19224863, PubMed:9334332). 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 (PubMed:11483518, PubMed:<a href="http://www.uniprot.org/citations/19224863"



target=" blank">19224863, PubMed:9334332). Mediates E3 ubiquitin ligase activity either through direct binding to substrates or by functioning as the essential RING domain subunit of larger E3 complexes (PubMed:11483518, PubMed: 19224863, PubMed:9334332). Triggers the ubiquitin-mediated degradation of many substrates, including proteins involved in transcription regulation (GPS2, POU2AF1, PML, NCOR1), a cell surface receptor (DCC), an antiapoptotic protein (BAG1), and a protein involved in synaptic vesicle function in neurons (SYP) (PubMed:11483518, PubMed:19224863, PubMed:9334332). Mediates ubiquitination and proteasomal degradation of DYRK2 in response to hypoxia (PubMed:22878263). It is thereby involved in apoptosis, tumor suppression, cell cycle, transcription and signaling processes (PubMed: 11483518, PubMed:19224863, PubMed:22878263, PubMed:9334332). Has some overlapping function with SIAH1 (PubMed:11483518, PubMed:19224863, PubMed:9334332). Triggers the ubiquitin-mediated degradation of TRAF2, whereas SIAH1 does not (PubMed:12411493). Promotes monoubiquitination of SNCA (PubMed: 19224863). Regulates cellular clock function via ubiquitination of the circadian transcriptional repressors NR1D1 and NR1D2 leading to their proteasomal degradation (PubMed:26392558). Plays an important role in mediating the rhythmic degradation/clearance of NR1D1 and NR1D2 contributing to their circadian profile of protein abundance (PubMed:26392558). Mediates ubiquitination and degradation of EGLN2 and EGLN3 in response to the unfolded protein response (UPR), leading to their degradation and subsequent stabilization of ATF4 (By similarity). Also part of the Wnt signaling pathway in which it mediates the Wnt-induced ubiquitin- mediated proteasomal degradation of AXIN1.

Cellular Location

Cytoplasm. Nucleus Note=Predominantly cytoplasmic. Partially nuclear

Tissue Location

Widely expressed at low level.

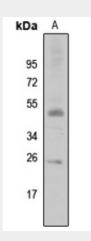
Anti-SIAH2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

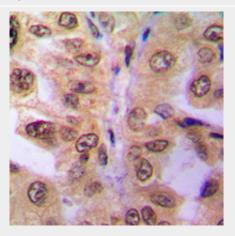
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



Anti-SIAH2 Antibody - Images



Western blot analysis of SIAH2 expression in zebrafish (A) whole cell lysates.



Immunohistochemical analysis of SIAH2 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of SIAH2 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and



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incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Anti-SIAH2 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human SIAH2. The exact sequence is proprietary.