

# SIAH2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5878c

# Specification

# SIAH2 Antibody (Center) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P, FC,E O43255 O9I8X5, O8R4T2, O06986, O7SYL3, NP\_005058.3 Human Zebrafish, Mouse, Rat, Xenopus Rabbit Polyclonal Rabbit IgG 216-244

# SIAH2 Antibody (Center) - Additional Information

Gene ID 6478

**Other Names** E3 ubiquitin-protein ligase SIAH2, 632-, Seven in absentia homolog 2, Siah-2, hSiah2, SIAH2

#### Target/Specificity

This SIAH2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 216-244 amino acids from the Central region of human SIAH2.

**Dilution** WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### Precautions

SIAH2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# SIAH2 Antibody (Center) - 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 ubiguitin to targeted substrates (PubMed:11483518, PubMed:<u>19224863</u>, PubMed:<u>9334332</u>). 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:<u>19224863</u>, PubMed:<u>22878263</u>, PubMed:<u>9334332</u>). Has some overlapping function with SIAH1 (PubMed:<u>11483518</u>, PubMed:<u>19224863</u>, PubMed:<u>9334332</u>). Triggers the ubiquitin-mediated degradation of TRAF2, whereas SIAH1 does not (PubMed:<u>12411493</u>). Promotes monoubiguitination of SNCA (PubMed: <u>19224863</u>). Regulates cellular clock function via ubiguitination 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 ubiguitination 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 ubiguitin- mediated proteasomal degradation of AXIN1.

### **Cellular Location**

Cytoplasm. Nucleus Note=Predominantly cytoplasmic. Partially nuclear

**Tissue Location** Widely expressed at low level.

# SIAH2 Antibody (Center) - Protocols

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

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

# SIAH2 Antibody (Center) - Images



SIAH2 Antibody (Center) (Cat. #AP5878c) western blot analysis in T47D cell line lysates (35ug/lane).This demonstrates the SIAH2 antibody detected the SIAH2 protein (arrow).



SIAH2 Antibody (Center) (Cat. #AP5878c) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SIAH2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



SIAH2 Antibody (Center) (Cat. #AP5878c) flow cytometric analysis of T47D cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.