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SIAH1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16396c

Specification

SIAH1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q8IUQ4
Other Accession	NP_003022.3, NP_001006611.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**31123**
Antigen Region	**92-120**

SIAH1 Antibody (Center) - Additional Information

Gene ID 6477

Other Names
E3 ubiquitin-protein ligase SIAH1, 632-, Seven in absentia homolog 1, Siah-1, Siah-1a, SIAH1, HUMSIAH

Target/Specificity
This SIAH1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 92-120 amino acids from the Central region of human SIAH1.

Dilution
WB~~1:1000

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
SIAH1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SIAH1 Antibody (Center) - Protein Information

Name SIAH1

Synonyms HUMSIAH

Function E3 ubiquitin-protein ligase that mediates ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:14506261, PubMed:14645235, PubMed:14654780, PubMed:15064394, PubMed:16085652, PubMed:19224863, PubMed:20508617, PubMed:22483617, PubMed:9334332, PubMed:9858595, PubMed:28546513, PubMed:32430360, PubMed:33591310). 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:14506261, PubMed:14645235, PubMed:14654780, PubMed:15064394, PubMed:16085652, PubMed:19224863, PubMed:20508617, PubMed:22483617, PubMed:9334332, PubMed:9858595). 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:14506261, PubMed:14645235, PubMed:14654780, PubMed:15064394, PubMed:16085652, PubMed:19224863, PubMed:20508617, PubMed:22483617, PubMed:9334332, PubMed:9858595). 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 (PubMed:10747903, PubMed:11146551, PubMed:11389839, PubMed:11389840, PubMed:11483517, PubMed:11483518, PubMed:11752454, PubMed:12072443). Confers constitutive instability to HIPK2 through proteasomal degradation (PubMed:18536714, PubMed:33591310). It is thereby involved in many cellular processes such as apoptosis, tumor suppression, cell cycle, axon guidance, transcription regulation, spermatogenesis and TNF-alpha signaling (PubMed:14506261, PubMed:14645235, PubMed:14654780, PubMed:15064394, PubMed:16085652, PubMed:19224863, PubMed:20508617, PubMed:22483617, PubMed:9334332, PubMed:9858595). Has some overlapping function with SIAH2 (PubMed:14506261, PubMed:14645235, PubMed:14654780, PubMed:15064394, PubMed:16085652, PubMed:19224863, PubMed:20508617, PubMed:22483617, PubMed:9334332, PubMed:9858595). Induces apoptosis in cooperation with PEG3 (By similarity). Upon nitric oxid (NO) generation that follows apoptotic stimulation, interacts with S-nitrosylated GAPDH, mediating the translocation of GAPDH to the nucleus (By similarity). GAPDH acts as a stabilizer of SIAH1, facilitating the degradation of nuclear proteins (By similarity). 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 (PubMed:28546513, PubMed:32430360).

Cellular Location
Cytoplasm. Nucleus. Note=Predominantly cytoplasmic. Partially nuclear

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

SIAH1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SIAH1 Antibody (Center) - Images

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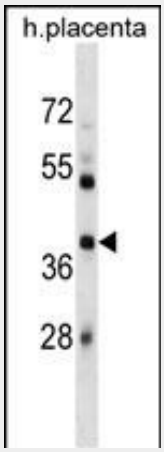

SIAH1 Antibody (Center) (Cat. #AP16396c) western blot analysis in human placenta tissue lysates (35ug/lane).This demonstrates the SIAH1 antibody detected the SIAH1 protein (arrow).

SIAH1 Antibody (Center) - Background

SIAH1 is 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. [provided by RefSeq].

SIAH1 Antibody (Center) - References

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