

SIAH1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP16396c**Specification**

SIAH1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q8IUQ4](#)**SIAH1 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 6477**Other Names**

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SIAH1 Antibody (Center) Blocking Peptide - Protein Information**Name** SIAH1**Synonyms** HUMSIAH**Function**

E3 ubiquitin-protein ligase that mediates ubiquitination and subsequent proteasomal degradation of target proteins (PubMed: [14506261](http://www.uniprot.org/citations/14506261) target="_blank">14506261, PubMed: [14645235](http://www.uniprot.org/citations/14645235) target="_blank">14645235, PubMed: [14654780](http://www.uniprot.org/citations/14654780) target="_blank">14654780, PubMed: [15064394](http://www.uniprot.org/citations/15064394) target="_blank">15064394, PubMed: [16085652](http://www.uniprot.org/citations/16085652) target="_blank">16085652, PubMed: [19224863](http://www.uniprot.org/citations/19224863) target="_blank">19224863, PubMed: [20508617](http://www.uniprot.org/citations/20508617) target="_blank">20508617, PubMed: [22483617](http://www.uniprot.org/citations/22483617) target="_blank">22483617, PubMed: [9334332](http://www.uniprot.org/citations/9334332) target="_blank">9334332, PubMed: [9858595](http://www.uniprot.org/citations/9858595) target="_blank">9858595, PubMed: [28546513](http://www.uniprot.org/citations/28546513) target="_blank">28546513, PubMed: [32430360](http://www.uniprot.org/citations/32430360) target="_blank">32430360, PubMed: [33591310](http://www.uniprot.org/citations/33591310) target="_blank">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 (SYN), a structural protein (CTNNA1) 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).

[19224863](http://www.uniprot.org/citations/19224863), PubMed: [20508617](http://www.uniprot.org/citations/20508617), PubMed: [22483617](http://www.uniprot.org/citations/22483617), PubMed: [9334332](http://www.uniprot.org/citations/9334332), PubMed: [9858595](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/28546513), PubMed: [32430360](http://www.uniprot.org/citations/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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SIAH1 Antibody (Center) Blocking Peptide - Images**SIAH1 Antibody (Center) Blocking Peptide - Background**

SIAH1 is a protein that is a member of the sevenin 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) Blocking Peptide - References

Wu, H., et al. Biochem. Biophys. Res. Commun. 397(3):391-396(2010) Wen, Y.Y., et al. Mol. Carcinog. 49(5):440-449(2010) Dimitrova, Y.N., et al. J. Biol. Chem. 285(18):13507-13516(2010) Bruzzoni-Giovanelli, H., et al. J. Exp. Clin. Cancer Res. 29, 10 (2010) :Xie, W., et al. J. Cell. Mol. Med. 13 (8B), 1719-1727 (2009) :