

SPOP Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18747a

Specification

SPOP Antibody (N-term) - Product Information

Application WB,E
Primary Accession O43791

Other Accession <u>Q6ZWS8, Q7T330, Q0VCW1, Q0IHH9, Q7ZX06,</u>

NP_003554.1

Reactivity

Predicted Xenopus, Bovine, Zebrafish, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 86-115

SPOP Antibody (N-term) - Additional Information

Gene ID 8405

Other Names

Speckle-type POZ protein, HIB homolog 1, Roadkill homolog 1, SPOP

Target/Specificity

This SPOP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 86-115 amino acids from the N-terminal region of human SPOP.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

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

SPOP Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SPOP Antibody (N-term) - Protein Information

Name SPOP (HGNC:11254)



Function Component of a cullin-RING-based BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex that mediates the ubiquitination of target proteins, leading most often to their proteasomal degradation. In complex with CUL3, involved in ubiquitination and proteasomal degradation of BRMS1, DAXX, PDX1/IPF1, GLI2 and GLI3. In complex with CUL3, involved in ubiquitination of MACROH2A1 and BMI1; this does not lead to their proteasomal degradation. Inhibits transcriptional activation of PDX1/IPF1 targets, such as insulin, by promoting PDX1/IPF1 degradation. The cullin-RING-based BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex containing homodimeric SPOP has higher ubiquitin ligase activity than the complex that contains the heterodimer formed by SPOP and SPOPL. Involved in the regulation of bromodomain and extra-terminal motif (BET) proteins BRD2, BRD3, BRD4 stability (PubMed: 32109420). Plays an essential role for proper translation, but not for their degradation, of critical DNA replication licensing factors CDT1 and CDC6, thereby participating in DNA synthesis and cell proliferation (PubMed: 36791496). Regulates interferon regulatory factor 1/IRF1 proteasomal turnover by targeting S/T-rich degrons in IRF1 (PubMed: 37622993), Facilitates the lysosome-dependent degradation of enterovirus EV71 protease 2A by inducing its 'Lys-48'- linked polyubiquitination, which ultimately restricts EV71 replication (PubMed: 37796126). Acts as an antiviral factor also against hepatitis B virus/HBV by promoting ubiquitination and subsequent degradation of HNF1A (PubMed: 38018242). In turn, inhibits HBV transcription and replication by preventing HNF1A stimulating activity of HBV preS1 promoter and enhancer II (PubMed: 38018242). Involved in ubiquitination of BRDT and promotes its degradation, thereby regulates histone removal in early condensing spermatids prior to histone-to-protamine exchange (By similarity).

Cellular LocationNucleus. Nucleus speckle Cytoplasm

Tissue LocationWidely expressed..

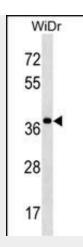
SPOP Antibody (N-term) - Protocols

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

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

SPOP Antibody (N-term) - Images





SPOP Antibody (N-term)(Cat. #AP18747a) western blot analysis in WiDr cell line lysates (35ug/lane). This demonstrates the SPOP antibody detected the SPOP protein (arrow).

SPOP Antibody (N-term) - Background

This gene encodes a protein that may modulate the transcriptional repression activities of death-associated protein 6 (DAXX), which interacts with histone deacetylase, core histones, and other histone-associated proteins. In mouse, the encoded protein binds to the putative leucine zipper domain of macroH2A1.2, a variant H2A histone that is enriched on inactivated X chromosomes. The BTB/POZ domain of this protein has been shown in other proteins to mediate transcriptional repression and to interact with components of histone deacetylase co-repressor complexes. Alternative splicing of this gene results in multiple transcript variants encoding the same protein. [provided by RefSeq].

SPOP Antibody (N-term) - References

Rose, J. Phd, et al. Mol. Med. (2010) In press: Zhuang, M., et al. Mol. Cell 36(1):39-50(2009) Liu, J., et al. Science 323(5918):1218-1222(2009) Bunce, M.W., et al. J. Biol. Chem. 283(13):8678-8686(2008) Byun, B., et al. Biofactors 31 (3-4), 165-169 (2007):