10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SPOP Polyclonal Antibody

Catalog # AP73987

Product Information

Application	WB, IHC-P
Primary Accession	O43791
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42132

Additional Information

Gene ID	8405
Other Names	Speckle-type POZ protein (HIB homolog 1) (Roadkill homolog 1)
Dilution	WB~~WB 1:500-2000, ELISA 1:10000-20000 IHC-P~~WB 1:500-2000, ELISA 1:10000-20000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

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).

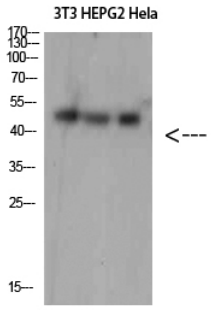
Cellular Location Nucleus. Nucleus speckle Cytoplasm

Tissue Location Widely expressed..

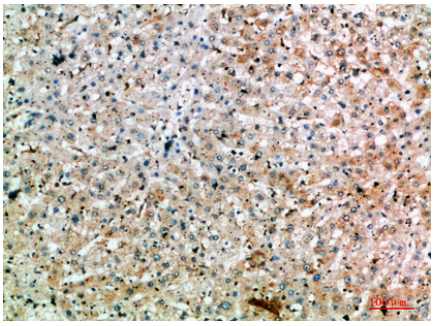
Background

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 H2AFY 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.

Images

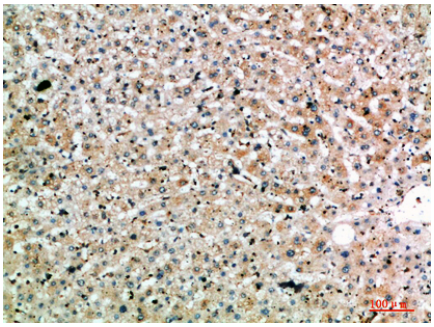


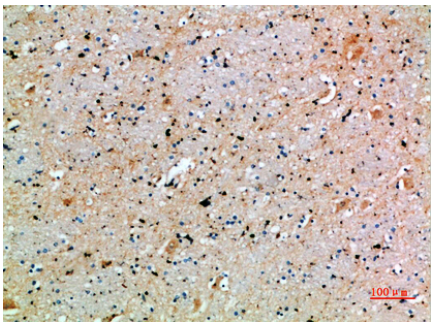
Western Blot analysis of 3T3 HEPG2 Hela cells using SPOP Polyclonal Antibody diluted at 1:1500. Secondary antibody was diluted at 1:20000



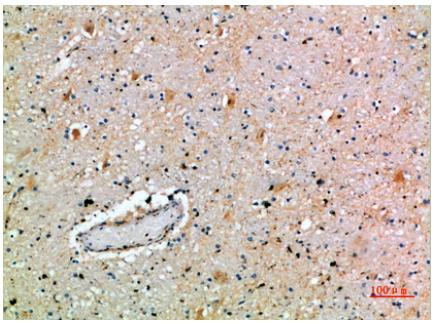
Immunohistochemical analysis of paraffin-embedded human-liver, antibody was diluted at 1:200

Immunohistochemical analysis of paraffin-embedded human-liver, antibody was diluted at 1:200





Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:200



Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:200

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