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

SPOP Antibody

Rabbit mAb
Catalog # AP92222

Product Information

Application	WB
Primary Accession	O43791
Reactivity	Human
Clonality	Monoclonal
Other Names	BTBD32; SPOP; TEF2;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	42132

Additional Information

Dilution	WB 1:500~1:1000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human SPOP
Description	Inhibits IPF1/PDX1 transactivation of established target promoters, such as insulin, may be by recruiting a repressor complex (By similarity). In complex with CUL3, involved in ubiquitination of BMI1, H2AFY and DAXX, and probably also in ubiquitination and proteasomal degradation of Gli2 or Gli3.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

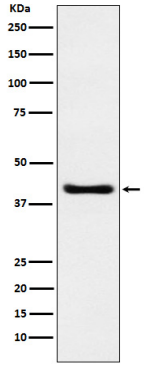
Name	SPOP (HGNC:11254)
Function	Component of a cullin-RING-based BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex that mediates the ubiquitination of target proteins, leading most often to their proteasomal degradation. In complex with CUL3, involved in ubiquitination and proteasomal degradation 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..

Images



Western blot analysis of SPOP expression in HepG2 cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.