

For Research Use Only

# SPOP Polyclonal antibody

Catalog Number: 16750-1-AP

Featured Product

36 Publications



## Basic Information

### Catalog Number:

16750-1-AP

### Size:

150UL, Concentration: 213 µg/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG10215

### GenBank Accession Number:

BC003385

### GeneID (NCBI):

8405

### Full Name:

speckle-type POZ protein

### Calculated MW:

374 aa, 42 kDa

### Observed MW:

42 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

IHC 1:50-1:500

IF 1:50-1:500

## Applications

### Tested Applications:

IF, IHC, WB, ELISA

### Cited Applications:

CoIP, IF, IHC, IP, WB

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB: HeLa cells, HepG2 cells, PC-3 cells

IHC: human prostate cancer tissue,

IF: HepG2 cells,

## Background Information

The SPOP (TEF2) protein was previously identified as an autoantigen in a patient with scleroderma pigmentosum. SPOP (speckle-type POZ protein), also known as TEF2, HIB homolog 1 or Roadkill homolog 1, is a member of the Tdpoz family containing one N-terminal MATH (Meprin and TRAF Homology) domain and one C-terminal BTB/POZ domain. SPOP can exist as a homodimer and is expressed in a variety of tissues localizing to the nucleus. BTB-mediated SPOP dimers form linear oligomers via BACK domain dimerization, and we determine the concentration-dependent populations of the resulting oligomeric species PMID: 27220849. Through an interaction with CUL-3, SPOP is involved in ubiquitylation and protein degradation. SPOP specifically interacts with CUL-3 via its BTB/POZ domain and recruits substrates to the CUL-3-based ubiquitin ligase via its MATH domain. Substrates recruited by SPOP and targeted for ubiquitylation via the CUL-3/SPOP complex include PDX-1, Bmi-1, MacroH2A, PIPK II  $\beta$  and Daxx. These substrates are subsequently degraded by the proteasome. In addition, SPOP itself becomes ubiquitylated by the CUL-3-based ubiquitin ligase and is targeted for proteasomal degradation.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yuqian Yan	31559706	EMBO Mol Med	WB
Jian An	26344096	Mol Cell	WB, IHC
Wenjian Gan	26344095	Mol Cell	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.1% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

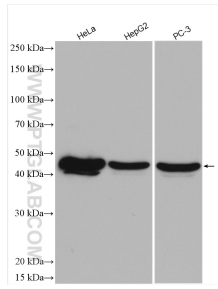
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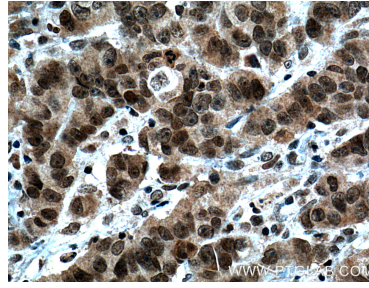
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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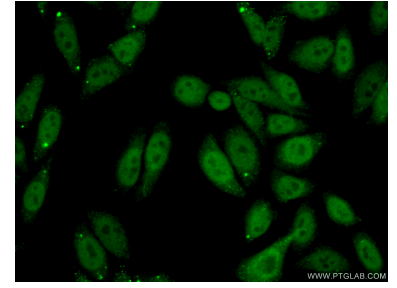
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 16750-1-AP (SPOP antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 16750-1-AP (SPOP Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (10% Formaldehyde) fixed HepG2 cells using 16750-1-AP (SPOP antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).