

For Research Use Only

# SPOP Polyclonal antibody

Catalog Number: 16750-1-AP

Featured Product

78 Publications



## Basic Information

### Catalog Number:

16750-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG10215

### GenBank Accession Number:

BC003385

### GeneID (NCBI):

8405

### UNIPROT ID:

O43791

### Full Name:

speckle-type POZ protein

### Calculated MW:

374 aa, 42 kDa

### Observed MW:

42 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP, RIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

### Positive Controls:

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

IP: HepG2 cells,

IF/ICC: 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
Carley Snoznik	34593637	Proc Natl Acad Sci U S A	WB
Jianong Zhang	34588438	Nat Commun	WB
Lan Zhang	34586738	Clin Transl Med	WB, RIP, IHC

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

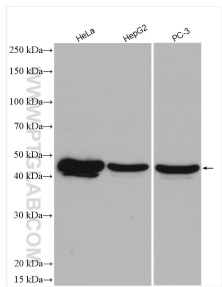
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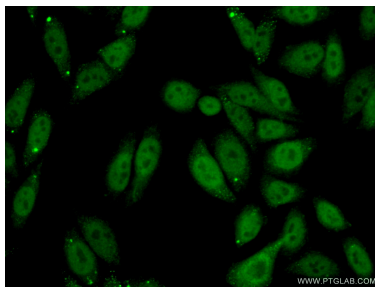
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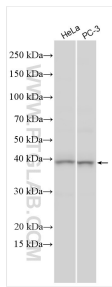
Selected Validation Data



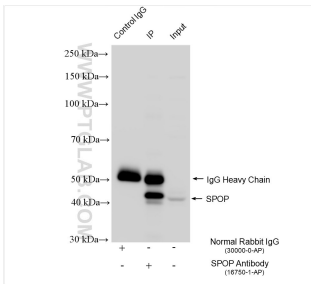
Various lysates were subjected to SDS PAGE followed by western blot with 16750-1-AP (SPOP antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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).



Various lysates were subjected to SDS PAGE followed by western blot with 16750-1-AP (SPOP antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



IP result of anti-SPOP (IP:16750-1-AP, 4ug; Detection:16750-1-AP 1:2000) with HepG2 cells lysate 1320 ug.