SPOP Polyclonal antibody

Catalog Number: 16750-1-AP

Basic Information

Catalog Number: 16750-1-AP

Size:
150μl, Concentration: 500μg/ml by Nanodrop and 213μg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG10215

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, RIP, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse

Positive Controls:
WB: HeLa cells, HepG2 cells, PC-3 cells
IHC: human prostate cancer tissue,
IF: HepG2 cells,

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

Background Information

The SPOP (TEF2) protein was previously identified as an autoantigen in a patient with scleroderma pigmentosum. SPOP (spckle-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 ubiquitinylation 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

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<th>Author</th>
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<tr>
<td>Jianong Zhang</td>
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<td>Lan Zhang</td>
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<td>Yuqian Yan</td>
<td>31559706</td>
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Storage

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

Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
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).