

For Research Use Only

# SUMO2/3 Polyclonal antibody

Catalog Number: 10947-1-AP

Featured Product

1 Publications



## Basic Information

### Catalog Number:

10947-1-AP

### Size:

150ul, Concentration: 600 ug/ml by Nanodrop and 347 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG1388

### GenBank Accession Number:

BC008450

### GeneID (NCBI):

6613

### UNIPROT ID:

P61956

### Full Name:

SMT3 suppressor of mif two 3 homolog 2 (S. cerevisiae)

### Calculated MW:

11 kDa

### Observed MW:

18-20 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

IHC 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human

**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** : HEK-293 cells, Jurkat cells, A549 cells, Recombinant protein protein

**IHC** : human colon cancer tissue,

**IF/ICC** : HeLa cells,

## Background Information

Ubiquitin is most famous for its function in targeting proteins for degradation by the 26S proteasome, ubiquitin needs to be attached to a substrate in chains (polyubiquitylation) before being recognized by proteasome. Similarly, SUMO (small ubiquitin-related modifier) can be linked to substrates in chains (polysumoylation), SUMO modification has been implicated in many important cellular processes including the control of genome stability, signal transduction, targeting to and formation of nuclear compartments, cell cycle and meiosis. There are 4 confirmed SUMO isoforms in human, SUMO-1, SUMO-2, SUMO-3 and SUMO-4. SUMO-2 and SUMO-3 are nearly identical but are distinct from SUMO-1. SUMO2/3 conjugation was recently widely involved in neuroprotective activities. A substitution (M55V) of SUMO4 was strongly associated with the pathogenesis of type 1 diabetes (T1D) involving NF kappa B related mechanisms.

## Notable Publications

Author	Pubmed ID	Journal	Application
Francesco Antoniani	37454169	Cell Death Discov	WB, IF

## Storage

### 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

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

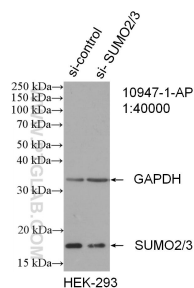
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

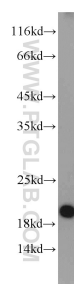
E: proteintech@ptglab.com  
W: ptglab.com

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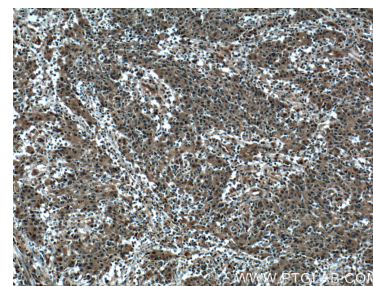
## Selected Validation Data



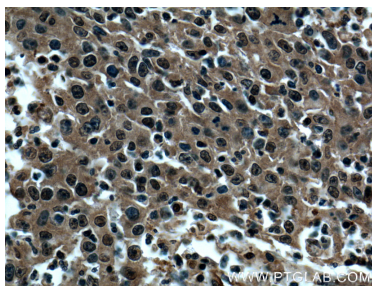
WB result of SUMO2/3 antibody (10947-1-AP; 1:40000; incubated at room temperature for 1.5 hours) with sh-Control and sh-SUMO2/3 transfected HEK-293 cells.



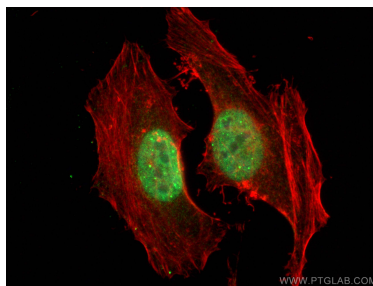
HEK-293 cells were subjected to SDS PAGE followed by western blot with 10947-1-AP (SUMO2/3 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10947-1-AP (SUMO2/3 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10947-1-AP (SUMO2/3 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using SUMO2/3 antibody (10947-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).