For Research Use Only

SUMO2/3 Polyclonal antibody

Catalog Number:11251-1-AP Featured Product 21 Publications

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Basic Information

Catalog Number:
11251-1-AP

Size:
150ul , Concentration: 500 ug/ml by Nanodrop and 220 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG1778

GenBank Accession Number:
BC016775

GeneID (NCBI):
6613

UNIPROT ID:
P61956

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

Calculated MW:
11 kDa

Observed MW:
11-20 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:3000
IHC 1:1000-1:4000
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Cited Applications:
WB, IHC, IF, IP, CoIP

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 : HEK-293 cells, HSC-T6 cells, HeLa cells, Jurkat cells, L02 cells, PC-12 cells

IHC : mouse colon tissue,

IF/ICC : HEK-293 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
Shuai Huang	31660066	Theranostics	WB
Xiaoqing Liu	34726485	mSystems	IP
Jing Cao	29512695	Int J Mol Med	IP

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**

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)
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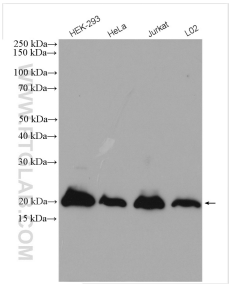
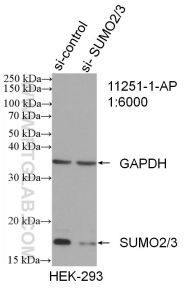
Selected Validation Data

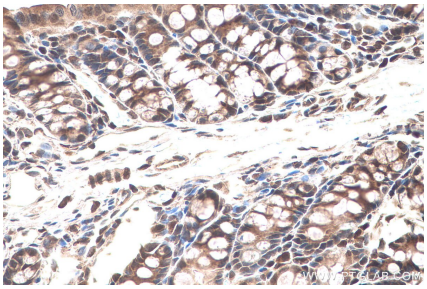


Various lysates were subjected to SDS PAGE followed by western blot with 11251-1-AP (SUMO2/3 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.

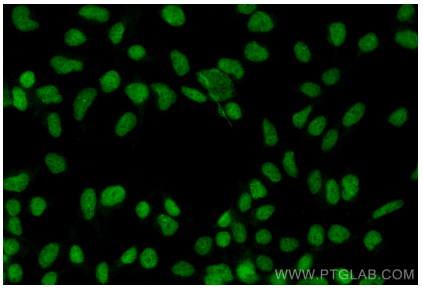


WB result of SUMO2/3 antibody (11251-1-AP; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-SUMO2/3 transfected HEK-293 cells.

Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 11251-1-AP (SUMO2/3 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 11251-1-AP (SUMO2/3 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using SUMO2/3 antibody (11251-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).