For Research Use Only

SUMO2/3 Monoclonal antibody

Catalog Number:67154-1-Ig Featured Product 1 Publications

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Basic Information

Catalog Number:
67154-1-Ig

Size:
150ul , Concentration: 2100 μg/ml by Nanodrop and 1000 μg/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG2b

Immunogen Catalog Number:
AG28672

GenBank Accession Number:
BC008450

GeneID (NCBI):
6613

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

Calculated MW:
11 kDa

Observed MW:
18 kDa

Purification Method:
Protein A purification

CloneNo.:
1A1B3

Recommended Dilutions:
WB 1:1000-1:6000
IHC 1:250-1:1000
IF 1:400-1:1600

Applications

Tested Applications:
IF, IHC, WB, ELISA

Cited Applications:
WB

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, NIH/3T3 cells, K-562 cells, HSC-T6 cells, PC-12 cells

IHC : human prostate cancer tissue, human breast cancer tissue

IF : 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
Orhi Barroso-Gomila	37996419	Nat Commun	WB

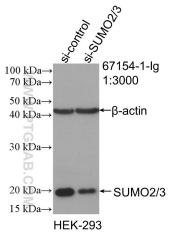
Storage

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

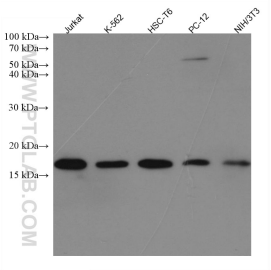
*** 20ul sizes contain 0.1% BSA

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

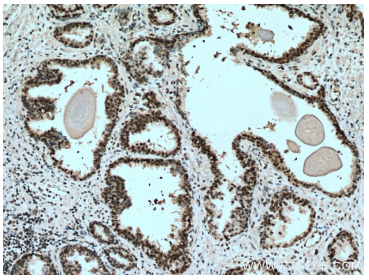
Selected Validation Data



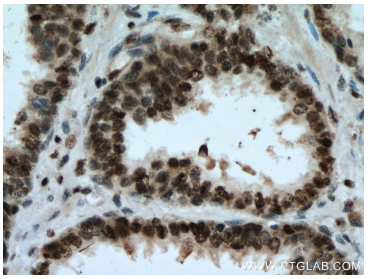
WB result of SUMO2/3 antibody (67154-1-Ig; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-SUMO2/3 transfected HEK-293 cells.



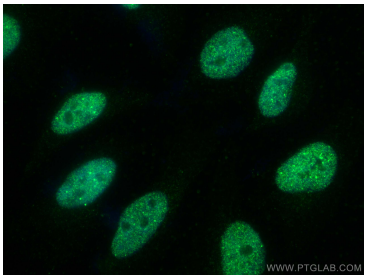
Various lysates were subjected to SDS PAGE followed by western blot with 67154-1-Ig (SUMO2/3 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 67154-1-Ig (SUMO2/3 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 67154-1-Ig (SUMO2/3 antibody) at dilution of 1:500 (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 (67154-1-Ig, Clone: 1A1B3) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).