For Research Use Only

SUMO1 Monoclonal antibody

Catalog Number:67559-1-Ig 5 Publications

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Basic Information

Catalog Number:
67559-1-Ig

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG29402

GenBank Accession Number:
BC006462

GeneID (NCBI):
7341

UNIPROT ID:
P63165

Full Name:
SMT3 suppressor of mif two 3 homolog 1 (S. cerevisiae)

Calculated MW:
12 kDa

Observed MW:
15-100 kDa

Purification Method:
Protein G purification

CloneNo.:
3B5B5

Recommended Dilutions:
WB: 1:1000-1:6000
IHC: 1:500-1:2000
IF/ICC: 1:800-1:3200

Applications

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

Cited Applications:
WB, IHC, IF, IP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat

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 : HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, HSC-T6 cells, NIH/3T3 cells, 4T1 cells

IHC : mouse kidney tissue, rat kidney tissue, rat small intestine tissue

IF/ICC : MCF-7 cells, A549 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.This antibody can detect endogenous levels of SUMOylated proteins (e.g. SUMO-1-RanGAP at 80-90 kD).

Notable Publications

Author	Pubmed ID	Journal	Application
Lei Zhao	41436983	BMC Cancer	WB
Zhidi Lin	40796734	Bone Res	WB,IHC
Qianshuo Liu	39794619	Cell Biol Toxicol	IF

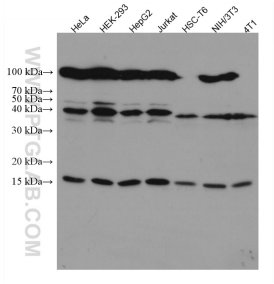
Storage

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

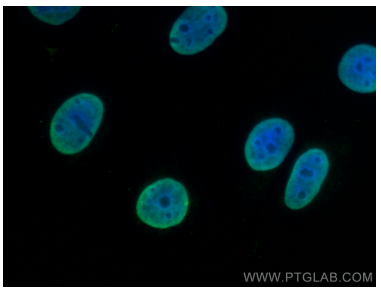
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

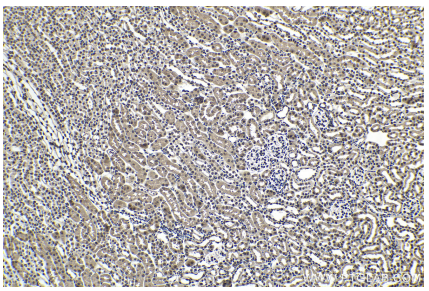
Selected Validation Data



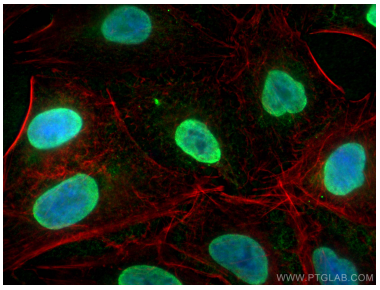
Various lysates were subjected to SDS PAGE followed by western blot with 67559-1-Ig (SUMO1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using SUMO1 antibody (67559-1-Ig, Clone: 3B5B5) at dilution of 1:1600 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 67559-1-Ig (SUMO1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed A549 cells using SUMO1 antibody (67559-1-Ig, Clone: 3B5B5) at dilution of 1:3200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).