

For Research Use Only

SUMO1 Polyclonal antibody, PBS Only

Catalog Number:10329-1-PBS



Basic Information

Catalog Number: 10329-1-PBS	GenBank Accession Number: BC006462	Purification Method: Antigen affinity purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 7341	
Source: Rabbit	UNIPROT ID: P63165	
Isotype: IgG	Full Name: SMT3 suppressor of mif two 3 homolog 1 (S. cerevisiae)	
Immunogen Catalog Number: AG0414	Calculated MW: 12 kDa	
	Observed MW: 12-18 kDa, 80-90 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), IP, Indirect ELISA

Species Specificity:
human, mouse, rat

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).

Storage

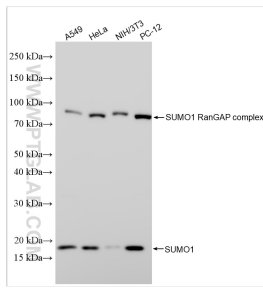
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

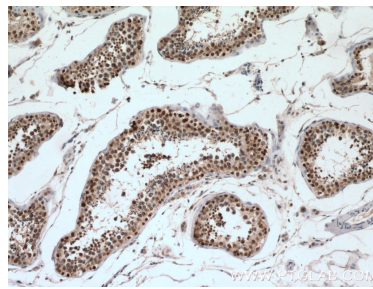
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

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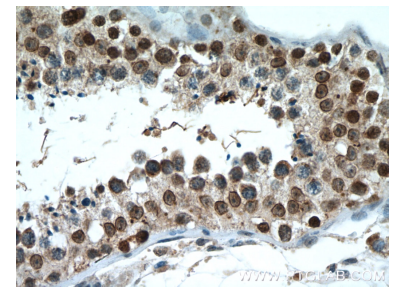
Selected Validation Data



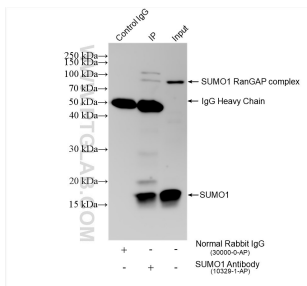
Various lysates were subjected to SDS PAGE followed by western blot with 10329-1-AP (SUMO1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 10329-1-PBS in a different storage buffer formulation.



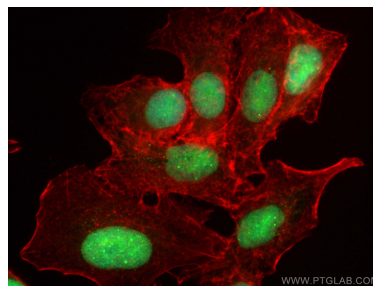
Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 10329-1-AP (SUMO1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 10329-1-PBS in a different storage buffer formulation.



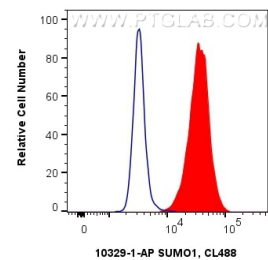
Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 10329-1-AP (SUMO1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 10329-1-PBS in a different storage buffer formulation.



IP result of anti-SUMO1 (IP:10329-1-AP, 4ug; Detection:10329-1-AP 1:800) with HeLa cells lysate 1600 ug. This data was developed using the same antibody clone with 10329-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed A549 cells using SUMO1 antibody (10329-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red). This data was developed using the same antibody clone with 10329-1-PBS in a different storage buffer formulation.



1×10^6 A549 cells were intracellularly stained with 0.4 ug Anti-Human SUMO1 (10329-1-AP) and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP, Clone:) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 10329-1-PBS in a different storage buffer formulation.