#### For Research Use Only

# SUMO2/3 Polyclonal antibody

Catalog Number:11251-1-AP

Featured Product

12 Publications



**Basic Information** 

Catalog Number: 11251-1-AP Size: 500 µ g/ml

Rabbit
Isotype:

Source:

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 IF 1:200-1:800

**Applications** 

Tested Applications: WB, IF/ICC, ELISA Cited Applications: WB, IP, IF, IHC, CoIP Species Specificity:

human, mouse, rat Cited Species: human, mouse **Positive Controls:** 

WB: HEK-293 cells, HSC-T6 cells, HeLa cells, Jurkat

cells, LO2 cells, PC-12 cells

IF: 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:

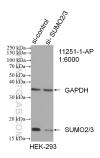
Store at -20°C. Stable for one year after shipment.

Storage Buffer

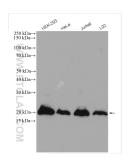
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

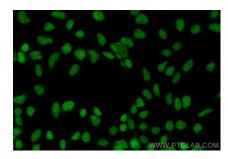
### **Selected Validation Data**



WB result of SUMO 2/3 antibody (11251-1-AP; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-SUMO 2/3 transfected HEK-293 cells.



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.



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).