

**SUMO2/3 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5087**

**Specification**

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**SUMO2/3 Antibody (C-term) - Product Information**

|                         |   |
|-------------------------|---|
| Application             | IF, WB,E  |
| Primary Accession       | <a href="#">P55854</a>  |
| Other Accession         | <a href="#">Q7SZ22</a> , <a href="#">Q5XIF4</a> , <a href="#">Q9Z172</a> , <a href="#">Q6DI05</a> , <a href="#">Q17OV3</a> ,<br><a href="#">P61959</a> , <a href="#">P61958</a> , <a href="#">P61957</a> , <a href="#">Q2PFW2</a> , <a href="#">P61956</a> ,<br><a href="#">Q6DHL4</a> , <a href="#">Q6LDZ8</a> , <a href="#">Q5ZJM9</a> , <a href="#">P61955</a> , <a href="#">Q6NV25</a> ,<br><a href="#">Q6GPW2</a> , <a href="#">Q7ZTK7</a> |
| Reactivity<br>Predicted | Human, Mouse<br>Xenopus, Zebrafish, Bovine, Chicken,<br>Hamster, Monkey, Pig, Rat   |
| Host                    | Rabbit  |
| Clonality               | Polyclonal  |
| Calculated MW           | H=12;M=12;Rat=12 KDa  |
| Isotype                 | Rabbit IgG  |
| Antigen Source          | HUMAN   |

**SUMO2/3 Antibody (C-term) - Additional Information**

**Gene ID** 6612

**Antigen Region**  
49-81

**Other Names**  
SUMO3; SMT3B; SMT3H1; Small ubiquitin-related modifier 3; SMT3 homolog 1; SUMO-2;  
Ubiquitin-like protein SMT3B

**Dilution**  
IF~~1:25  
WB~~1:1000

**Target/Specificity**  
This SUMO2/3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 49-81 amino acids from the C-terminal region of human SUMO2/3.

**Format**  
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**  
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**  
SUMO2/3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic

procedures.

## SUMO2/3 Antibody (C-term) - Protein Information

Name SUMO3 ([HGNC:11124](#))

### Function

Ubiquitin-like protein which can be covalently attached to target lysines either as a monomer or as a lysine-linked polymer. Does not seem to be involved in protein degradation and may function as an antagonist of ubiquitin in the degradation process. Plays a role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Covalent attachment to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by an E3 ligase such as PIAS1-4, RANBP2 or CBX4 (PubMed: [11451954](http://www.uniprot.org/citations/11451954), PubMed: [18538659](http://www.uniprot.org/citations/18538659), PubMed: [21965678](http://www.uniprot.org/citations/21965678)). Plays a role in the regulation of sumoylation status of SETX (PubMed: [24105744](http://www.uniprot.org/citations/24105744)).

### Cellular Location

Cytoplasm. Nucleus. Nucleus, PML body

### Tissue Location

Expressed predominantly in liver.

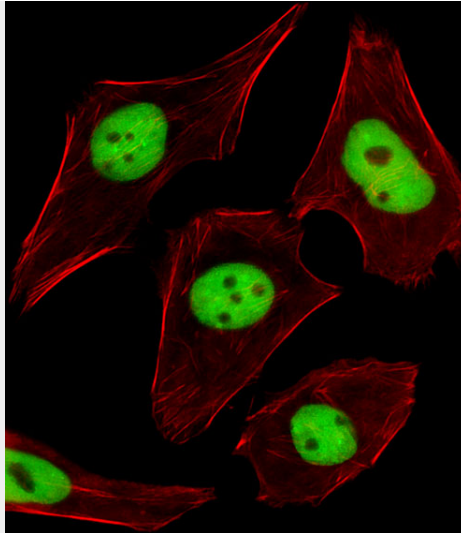
## SUMO2/3 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

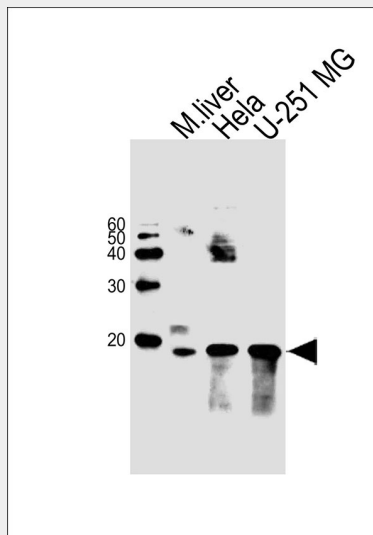
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## SUMO2/3 Antibody (C-term) - Images





Fluorescent image of U251 cells stained with SUMO2/3 Antibody(C-term) (Cat#AW5087). AW5087 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Western blot analysis of lysates from mouse liver tissue, HeLa, U-251 MG cell line (from left to right), using SUMO2/3 Antibody (C-term)(Cat. #AW5087). AW5087 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.

### **SUMO2/3 Antibody (C-term) - Background**

SUMO2 and SUMO3 are members of the SUMO (small ubiquitin-like modifier) protein family. This protein family functions in a manner similar to ubiquitin in that it is bound to target proteins as part of a post-translational modification system. However, unlike ubiquitin which targets proteins for degradation, this protein is involved in a variety of cellular processes, such as nuclear transport, transcriptional regulation, apoptosis, and protein stability. In vertebrates, three members of the SUMO family have been described, SUMO 1 and the functionally distinct homologues SUMO 2 and SUMO 3. SUMO modification sites present in the N terminal regions of SUMO 2 and SUMO 3 are utilized by SAE1/SAE2 (SUMO E1) and Ubc9 (SUMO E2) to form polymeric chains of SUMO 2 and SUMO 3 on protein substrates, a property not shared by SUMO 1.

### **SUMO2/3 Antibody (C-term) - References**

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).  
Lapenta, V., et al., Genomics 40(2):362-366 (1997).