10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

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

Application	**IF, WB,E**
Primary Accession	P55854
Other Accession	Q7SZ22, Q5XIF4, Q9Z172, Q6DI05, Q17QV3, P61959, P61958, P61957, Q2PFW2, P61956, Q6DHL4, Q6LDZ8, Q5ZJM9, P61955, Q6NV25, Q6GPW2, Q7ZTK7
Reactivity	**Human, Mouse**
Predicted	**Xenopus, Zebrafish, Bovine, Chicken, 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, PubMed:18538659, PubMed:21965678). Plays a role in the regulation of sumoylation status of SETX (PubMed: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 Cytomety
- Cell Culture

SUMO2/3 Antibody (C-term) - Images

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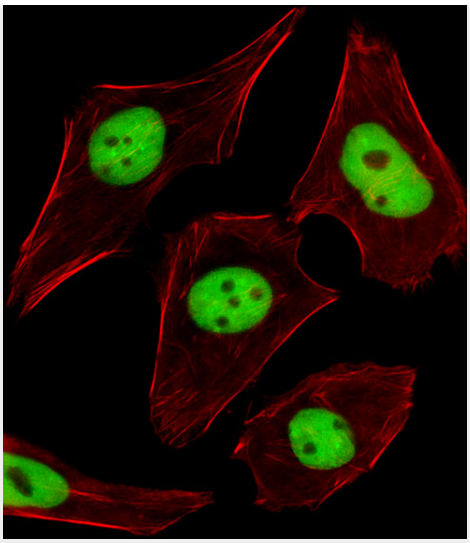
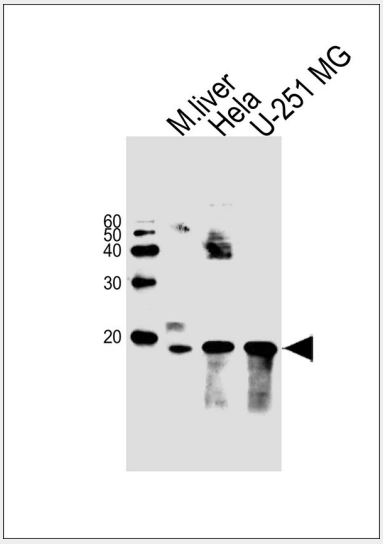


Fluorescent image of U251 cells stained with SUMO2/3 Antibody(C-term) (Cat#AW5087). AW5087 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated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