# Rabbit anti-Human SUMO1 Polyclonal Antibody | anti-SUMO1 antibody

SUMO1 Antibody (N-term E67)

| CATALOG # | HOST | REACTIVITY | APPLICATIONS |
|---|---|---|---|
| **AAA290340** | **Rabbit** | **Human** | **Immunofluorescence, Flow Cytometry, Functional Assay, Immunohistochemistry, ELISA, Western Blot** |

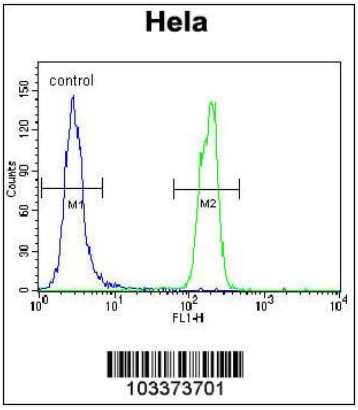
## PRODUCT SYNONYMS

SUMO1; Polyclonal Antibody; SUMO1 Antibody (N-term E67); Small ubiquitin-related modifier 1; SUMO-1; GAP-modifying protein 1; GMP1; SMT3 homolog 3; Sentrin; Ubiquitin-homology domain protein PIC1; Ubiquitin-like protein SMT3C; Smt3C; Ubiquitin-like protein UBL1; SMT3C; SMT3H3; UBL1; anti-SUMO1 antibody

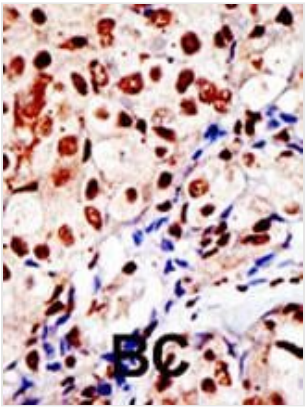
## PRODUCT SPECIFICATIONS

| | |
|---|---|
| **Host** | Rabbit |
| **Reactivity** | Human |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit Ig |
| **Specificity** | This SUMO1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 52-79 amino acids from the N-terminal region of human SUMO1. |
| **Purity/Purification** | Purified Rabbit Polyclonal Antibody (Pab) |
| **Form/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. |
| **Concentration** | Vial Concentration: 2 (varies by lot) |
| **Sequence Positions** | 52-79 |
| **Sequence Length** | 76 |
| **Applicable Applications for anti-SUMO1 antibody** | IF (Immunofluorescence), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), ELISA, WB (Western Blot) |
| **Antigen Type** | Synthetic Peptide |
| **Antigen Source** | HUMAN |
| **Preparation and Storage** | Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles. |

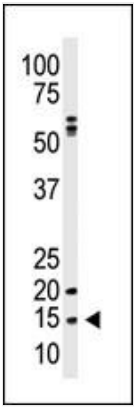
## IMAGES



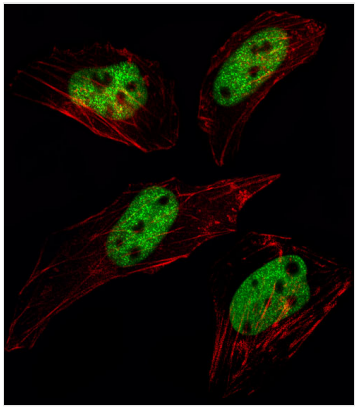

**FCM/FACS (Flow Cytometry)**
SUMO1 Antibody (N-term E67) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.




**IHC (Immunohistochemisry)**
Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.




**WB (Western Blot)**
Western blot analysis of anti-SUMO1 polyclonal antibody in A375 cell line lysate. SUMO1(arrow) was detected using the purified Pab.



**IF (Immunofluorescence)**
Fluorescent image of Hela cell stained with SUMO1 Antibody (N-term E67). Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with SUMO1 primary antibody (1:25, 1 h at 37 degree). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37 degree).Cytoplasmic actin was counterstained with Alexa Fluor 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37 degree). SUMO1 immunoreactivity is localized to Nucleus significantly.

## ADDITIONAL INFORMATION

| | |
|---|---|
| **Related Product Information for anti-SUMO1 antibody** | Covalent modification of target lysines by SUMO (small ubiquitin-like modifier) modulates processes such as protein localization, transcription, nuclear transport, mitosis, DNA replication and repair, signal transduction, and viral reproduction. SUMO does not seem to be involved in protein degradation and may in fact function as an antagonist of ubiquitin in the degradation process. The SUMO family consists of SUMO1 and closely related homologs SUMO2, SUMO3, and SUMO4. Sumoylation has been shown to regulate a wide range of proteins, including MDM2, PIAS, PML, RanGAP1, RanBP2, p53, p73, HIPK2, TEL, c-Jun, Fas, Daxx, TNFRI, Topo-I, Topo-II, PARK2, WRN, Sp100, IkB-alpha, Androgen receptor (AR), GLUT1/4, CaMK, DNMT3B, TDG, HIF1A, CHD3, EXOSC9, RAD51, and viral targets such as CMV-IE1/2, EBV-BZLF1, and HPV/BPV-E1. |
| **Product Categories/Family for anti-SUMO1 antibody** | Cardiovascular; Cell Biology; Metabolism |
| **References** | Yang, S.H., et al., Mol. Cell 13(4):611-617 (2004).<br>Bailey, D., et al., J. Biol. Chem. 279(1):692-703 (2004).<br>Ling, Y., et al., Nucleic Acids Res. 32(2):598-610 (2004).<br>Pountney, D.L., et al., Exp. Neurol. 184(1):436-446 (2003).<br>Ohshima, T., et al., J. Biol. Chem. 278(51):50833-50842 (2003). |

## NCBI AND UNIPROT INFORMATION

| | |
|---|---|
| **NCBI GI #** | 54792065 |
| **NCBI GeneID** | 7341 |
| **NCBI Accession #** | NP_001005781.1; NP_001005782.1; NP_003343.1 |
| **NCBI GenBank Nucleotide #** | NM_001005781.1 |
| **UniProt Accession #** | P63165; P55856; Q6FGG0; Q6NZ62; Q93068; A8MUS8; B2R4I5 |
| **Molecular Weight** | 11557 |
| **NCBI Official Full Name** | small ubiquitin-related modifier 1 isoform a |
| **NCBI Official Synonym Full Names** | small ubiquitin-like modifier 1 |
| **NCBI Official Symbol** | SUMO1 |
| **NCBI Official Synonym Symbols** | DAP1; GMP1; PIC1; SMT3; UBL1; OFC10; SENP2; SMT3C; SMT3H3 |
| **NCBI Protein Information** | small ubiquitin-related modifier 1 |
| **UniProt Protein Name** | Small ubiquitin-related modifier 1 |
| **UniProt Gene Name** | **SUMO1** |
| **UniProt Synonym Gene Names** | SMT3C; SMT3H3; UBL1; SUMO-1; GMP1; Smt3C |
| **UniProt Entry Name** | SUMO1_HUMAN |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

**AAA Biotech** | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: https://www.aaabiotech.com/polyclonal/sumo1-antibody-immunofluorescence-flow-cytometry-immunohistochemistry-western-blot-elisa/290340