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SUMO2 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5458

Specification

SUMO2 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	P61956
Other Accession	Q7SZ22, Q5XIF4, Q9Z172, P55854, Q6DI05, Q5ZHQ1, Q17QV3, P61959, P61958, P61957, Q2PFW2, Q6DHL4, Q6LDZ8, Q5ZJM9, P61955, Q6NV25, Q6GPW2, Q7ZTK7
Reactivity	**Human**
Predicted	**Xenopus, Zebrafish, Bovine, Chicken, Hamster, Monkey, Mouse, Pig, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**H=11;M=11;R=11 KDa**
Isotype	**Rabbit IgG**
Antigen Source	**HUMAN**

SUMO2 Antibody (C-term) - Additional Information

Gene ID 6613

Antigen Region
63-93

Other Names
Small ubiquitin-related modifier 2, SUMO-2, HSMT3, SMT3 homolog 2 {ECO:0000312|HGNC:HGNC:11125}, SUMO-3, Sentrin-2, Ubiquitin-like protein SMT3B, Smt3B, SUMO2 (HGNC:11125)

Dilution
WB~~1:1000

Target/Specificity
This SUMO2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 63-93 amino acids from the C-terminal region of human SUMO2.

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 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SUMO2 Antibody (C-term) - Protein Information

Name SUMO2 (HGNC:11125)

Function
Ubiquitin-like protein that can be covalently attached to proteins as a monomer or as a lysine-linked polymer. Covalent attachment via an isopeptide bond 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, CBX4 or ZNF451 (PubMed:26524494). This post-translational modification on lysine residues of proteins plays a crucial role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Polymeric SUMO2 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins (PubMed:18408734, PubMed:18538659, PubMed:21965678, PubMed:9556629). Plays a role in the regulation of sumoylation status of SETX (PubMed:24105744).

Cellular Location
Nucleus. Nucleus, PML body.

Tissue Location
Broadly expressed..

SUMO2 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 Antibody (C-term) - Images

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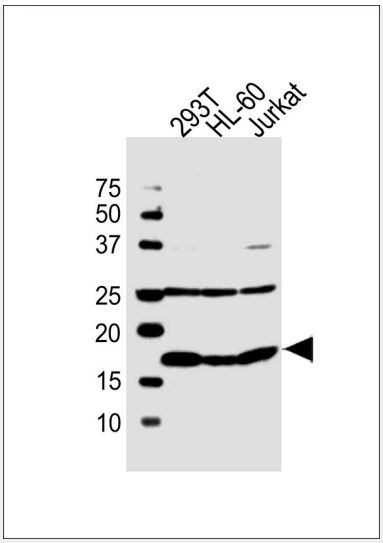

All lanes : Anti-SUMO2 Antibody at 1:1000 dilution Lane 1: 293T whole cell lysates Lane 2: HL-60 whole cell lysates Lane 3: Jurkat whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 11 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

SUMO2 Antibody (C-term) - Background

SUMO2 is a member 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 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).