

### SUMO2 Antibody (aa44-93)

Rabbit Polyclonal Antibody Catalog # ALS16555

# **Specification**

# SUMO2 Antibody (aa44-93) - Product Information

Application IHC, WB
Primary Accession P61956
Other Accession 6613

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal Isotype IgG

Calculated MW 10871

### SUMO2 Antibody (aa44-93) - Additional Information

#### **Gene ID** 6613

### **Other Names**

SUMO2, HSMT3, SMT3 homolog 2, SMT3A, Sentrin 2, Smt3B, SMT3H2, SUMO-2, SUMO-3, Sentrin-2, Ubiquitin-like protein SMT3A, Ubiquitin-like protein SMT3B

#### Target/Specificity

SUMO2/3 (Cleaved-Gly93) Antibody detects endogenous levels of fragment of activated SUMO2/3 resulting from cleavage adjacent to Gly93.

#### **Reconstitution & Storage**

PBS (without Mg2+, Ca2+), pH 7.4, 150 mM sodium chloride, 0.02% sodium azide, 50% glycerol. Store at -20°C for up to one year.

### **Precautions**

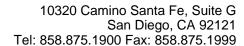
SUMO2 Antibody (aa44-93) is for research use only and not for use in diagnostic or therapeutic procedures.

### SUMO2 Antibody (aa44-93) - 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:<a href="http://www.uniprot.org/citations/26524494" target="\_blank">26524494</a>). 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:<a

href="http://www.uniprot.org/citations/18408734" target="\_blank">18408734</a>, PubMed:<a href="http://www.uniprot.org/citations/18538659" target="\_blank">18538659</a>, PubMed:<a href="http://www.uniprot.org/citations/21965678" target="\_blank">21965678</a>, PubMed:<a href="http://www.uniprot.org/citations/21965678" target="\_blank">9556629</a>). Plays a role in the regulation of sumoylation status of SETX (PubMed:<a

href="http://www.uniprot.org/citations/24105744" target=" blank">24105744</a>).

#### **Cellular Location**

Nucleus. Nucleus, PML body.

### **Tissue Location**

Broadly expressed..

#### Volume

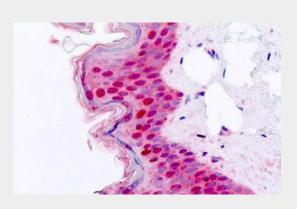
50 µl

### SUMO2 Antibody (aa44-93) - Protocols

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

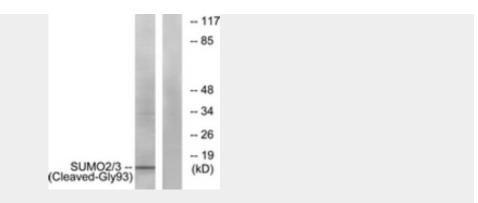
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# SUMO2 Antibody (aa44-93) - Images



Anti-SUMO2 antibody IHC staining of human skin.





Western blot of extracts from HeLa cells, using SUMO2/3 (Cleaved-Gly93) Antibody.

# SUMO2 Antibody (aa44-93) - Background

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 or CBX4. 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.

# SUMO2 Antibody (aa44-93) - References

Mannen H., et al. Biochem. Biophys. Res. Commun. 222:178-180(1996).

Lapenta V., et al. Genomics 40:362-367(1997).

Ota T., et al. Nat. Genet. 36:40-45(2004).

Zody M.C., et al. Nature 440:1045-1049(2006).

Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.