

## Summary

Production Name	Sumo 1 (13R11) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human, Mouse, Rat
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#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New typepreservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term.Avoid freeze / thaw cycle.
Purification	Affinity purification

## Immunogen

Gene Name	SUMO1
Alternative Names	DAP-1; GMP1; OFC10; PIC1; SENP2; SMT3; SMT3C; SMT3H3; SUMO1;UBL1;
Gene ID	7341.0
SwissProt ID	P63165.

# Application

Dilution Ratio	WB 1:500-1:2000
Molecular Weight	12kDa

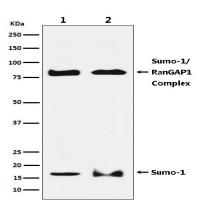


#### Background

SUMO1 Ubiquitin-like protein which can be covalently attached to target lysines as a monomer. 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. Ubiquitin-like protein that can be covalently attached to proteins as a monomer or 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 E3 ligases 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. Involved for instance in targeting RANGAP1 to the nuclear pore complex protein RANBP2. Covalently attached to the voltage-gated potassium channel KCNB1; this modulates the gating characteristics of KCNB1 (PubMed: <a href="http://www.uniprot.org/citations/19223394" target="\_blank">19223394</a>). Polymeric SUMO1 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins. May also regulate a network of genes involved in palate development. Covalently attached to ZFHX3 (PubMed: <a href="http://www.uniprot.org/citations/24651376" target="\_blank">24651376</a>).

### **Research Area**

#### **Image Data**



Western blot analysis of SUMO1 expression in (1) HeLa cell lysate; (2) NIH/3T3 cell lysate.

#### Note

For research use only.