

Sumo Antibody

Sumo: small-ubiquitin-like modifier 1, ubiquitin-like protein 1, GAP-modifying protein 1

CATALOG No.:3969

BACKGROUND:

The sumo family of proteins is related both structurally and functionally to ubiquitin in that they are post-translationally attached to the ϵ -amino group of a lysine residue of the substrate protein. This sumoylation plays a number of roles in DNA replication and repair, protein targeting to various subnuclear structures, and the regulation of numerous cellular processes including the inflammatory response in mammalian cells (reviewed in 1). Sumo was initially identified as a covalent modification of RanGAP1 in studies on nuclear import in mammalian cells (2). More recently, sumo has been shown to be involved in the regulation of transcription factors, possibly by enhancing their interactions with co-repressors (3). Sumo is also thought to play some role in the modulation of ubiquitin-mediated degradation of proteins by acting as an inhibitor (4). At least four different isoforms of sumo are known to exist; Sumo antibody will only recognize isoform 1.

SOURCE:

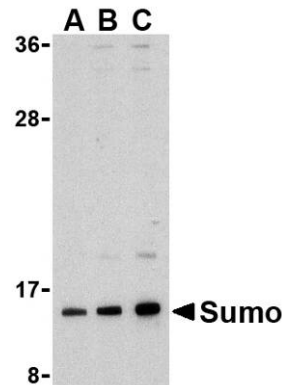
Rabbit polyclonal sumo antibody was raised against a 14 amino acid peptide from near the amino terminus of human sumo (GenBank accession no. AAH66306).

APPLICATION:

Sumo antibody can be used for detection of sumo by Western blot at 0.5 – 1 μ g/ml. (Optimal dilution should be determined by user.) HL-60 cell lysate can be used as positive control. Sumo antibody is human, mouse and rat reactive. **For research use only.**

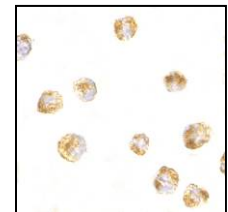
STORAGE:

Sumo antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of sumo in HL-60 cell lysate with sumo antibody at (A) 0.5, (B) 1, and (C) 2 μ g/ml.

Immunocytochemistry of Sumo in HL60 cells with Sumo antibody at 5 μ g/ml.



RELATED PRODUCTS:

Blocking Peptide, Catalog No. **3969P**.
HL-60 Cell Lysate, Catalog No. **1209**.
UBC13 Antibody, Catalog No. **3373**.
UEV1A Antibody, Catalog No. **3375**.

REFERENCES:

1. Dohmen R.J. Sumo protein modification. *Biochim. Biophys. Acta* 2004; 1695:113-31.
2. Matunis MJ, Coutavas E, and Blobel G. A novel ubiquitin-like modification modulates the partitioning of the Ran-GTPase-activating protein RanGAP1 between the cytosol and the nuclear pore complex. *J. Cell Biol.* 1996; 135:1457-70.
3. Gill G. Something about SUMO inhibits transcription. *Curr. Opin. Genet. Dev.* 2005; 15:536-41.
4. Desterro JM, Rodriguez MS, and Hay RT. SUMO-1 modification of I κ B α inhibits NF κ B activation. *Mol. Cell* 1998; 2:233-9.
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