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Xenopus SUMO2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1285a

Product Information

Application	WB, E
Primary Accession	Q7ZTK7
Other Accession	Q6GPW2
Reactivity	Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB3477
Calculated MW	10820
Antigen Region	1-30

Additional Information

Gene ID	379777
Other Names	Small ubiquitin-related modifier 2-A, SUMO-2-A, sumo2-a, smt3h2
Target/Specificity	This Xenopus SUMO2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human Xenopus SUMO2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	Xenopus SUMO2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	sumo2-a
Synonyms	smt3h2
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. 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.

Cellular Location Nucleus.

Background

SUMO2 is a ubiquitin-like protein which can be covalently attached to target lysines either as a monomer or as a lysine-linked polymer. SUMO2 does not seem to be involved in protein degradation and may function as an antagonist of ubiquitin in the degradation process. This protein plays a role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Covalent attachment 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 PIAS isoforms 1-4.

References

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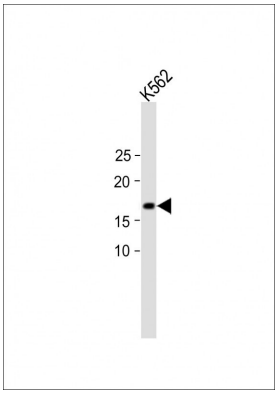
Kahyo T, et al., Mol Cell. 2001 Sep;8(3):713-8.
Yeh ET, et al., Gene. 2000 May 2;248(1-2):1-14. Review.
Keane,M.M., et al., Oncogene 18 (22), 3365-3375 (1999)

Images



All lanes: Anti-Xenopus SUMO2 Antibody (N-term) at 1:500 dilution + K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 17 KDa Blocking/Dilution buffer: 5% NFDM/TBST.