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Mouse SUMO3 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP1286b

Specification

Mouse SUMO3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9Z172

Mouse SUMO3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 20610

Other Names
Small ubiquitin-related modifier 3, SUMO-3, SMT3 homolog 1 {ECO:0000312|MGI:MGI:1336201}, Ubiquitin-like protein SMT3A, Smt3A, Sumo3 {ECO:0000312|MGI:MGI:1336201}

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP1286b was selected from the C-term region of human Mouse SUMO3 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse SUMO3 Antibody (C-term) Blocking Peptide - Protein Information

Name Sumo3 {ECO:0000312|MGI:MGI:1336201}

Function
Ubiquitin-like protein which can be covalently attached to target lysines either as a monomer or as a lysine-linked polymer. 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. 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 an E3 ligase such as PIAS1-4, RANBP2 or CBX4. Plays a role in the regulation of sumoylation status of SETX (By similarity).

Cellular Location
Cytoplasm. Nucleus. Nucleus, PML body

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Mouse SUMO3 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

Mouse SUMO3 Antibody (C-term) Blocking Peptide - Images

Mouse SUMO3 Antibody (C-term) Blocking Peptide - Background

Covalent attachment of one protein to another is one of the more prominent posttranslational modifications in respects to size and ubiquity ? to which eukaryotic proteins are subject. Ubiquitin is the most familiar of the protein modifiers and its activation and transfer to target proteins has been studied for over two decades. Recently a new group of ubiquitin-like (Ubl) proteins have come to light. One of the most intriguing of them is SUMO (small ubiquitin-like modifier, ~12kDa) also known as Sentrin. SUMO family has been described in vertebrates: SUMO-1 and the closest homologs SUMO-2 and SUMO-3. SUMO have been shown to bind and regulate mammalian SP-RINGs (such as Mdm2, PIAS and PML), RanGAP1, RanBP2, p53, p73, HIPK2, TEL, c-Jun, Fas, Daxx, TNFRI, Topo-I, Topo-II, WRN, Sp100, IkB-alpha, Androgen receptor (AR), GLUT1/4, Drosophila Ttk69, Dorsal, CaMK, yeast Septins, and viral CMV-IE1/2, EBV-BZLF1, HPV/BPV-E1. These bindings implicate SUMO in the stabilization of the target proteins and/or their localization to subcellular complexes. SUMO research enters now an exciting phase with a promise to help understanding how cells orchestrate the complexities of rapidly regulating protein level and activity.

Mouse SUMO3 Antibody (C-term) Blocking Peptide - References

Okazaki, Y., et al., Nature 420(6915):563-573 (2002).Chen, A., et al., Biochem. Mol. Biol. Int. 46(6):1161-1174 (1998).