

Mouse SUMO3 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP1286b

Specification

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

Primary Accession

09Z172

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



Tel: 858.875.1900 Fax: 858.875.1999

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 (UbI) 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).