

SAE1 (AOS1) Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP1199b

Specification

SAE1 (AOS1) Antibody (C-term) Blocking peptide - Product Information

Primary Accession Other Accession NP_005491

SAE1 (AOS1) Antibody (C-term) Blocking peptide - Additional Information

Gene ID 10055

Other Names

SUMO-activating enzyme subunit 1, Ubiquitin-like 1-activating enzyme E1A, SUMO-activating enzyme subunit 1, N-terminally processed, SAE1, AOS1, SUA1, UBLE1A

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1199b was selected from the C-term region of human SAE1. 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.

SAE1 (AOS1) Antibody (C-term) Blocking peptide - Protein Information

Name SAE1

Synonyms AOS1, SUA1, UBLE1A

Function

The heterodimer acts as an E1 ligase for SUMO1, SUMO2, SUMO3, and probably SUMO4. It mediates ATP-dependent activation of SUMO proteins followed by formation of a thioester bond between a SUMO protein and a conserved active site cysteine residue on UBA2/SAE2.

Cellular Location

Nucleus.

Tissue Location



Expression level increases during S phase and drops in G2 phase (at protein level).

SAE1 (AOS1) Antibody (C-term) Blocking peptide - Protocols

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

• Blocking Peptides

SAE1 (AOS1) Antibody (C-term) Blocking peptide - Images

SAE1 (AOS1) 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.

SAE1 (AOS1) Antibody (C-term) Blocking peptide - References

Desterro, J.M., et al., J. Biol. Chem. 274(15):10618-10624 (1999).Gong, L., et al., FEBS Lett. 448(1):185-189 (1999).Okuma, T., et al., Biochem. Biophys. Res. Commun. 254(3):693-698 (1999).