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SAE1 (AOS1) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2511b

Specification

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

Application	**WB, IHC-P,E**
Primary Accession	Q9UBE0
Other Accession	Q6AXQ0, Q9R1T2, A2VE14
Reactivity	**Human, Mouse**
Predicted	**Bovine, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**38450**
Antigen Region	**300-329**

SAE1 (AOS1) Antibody (C-term) - 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
This SAE1 (AOS1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 300-329 amino acids from the C-terminal region of human SAE1 (AOS1).

Dilution
WB~~1:1000
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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
SAE1 (AOS1) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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

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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.

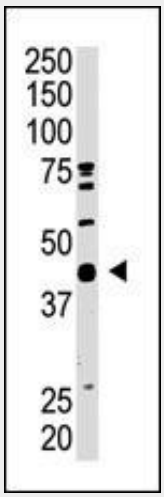
Tissue Location
Expression level increases during S phase and drops in G2 phase (at protein level).

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

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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



The AOS1 C-term Pab (Cat. #AP2511b) is used in Western blot to detect AOS1 in mouse heart tissue lysate.

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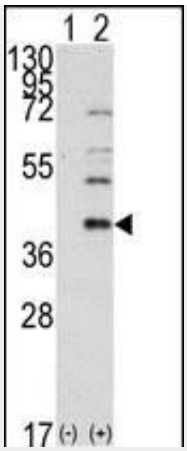
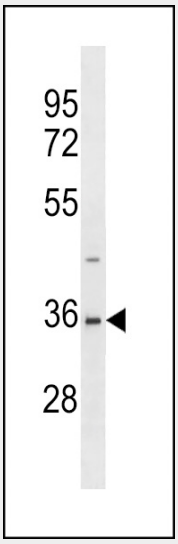
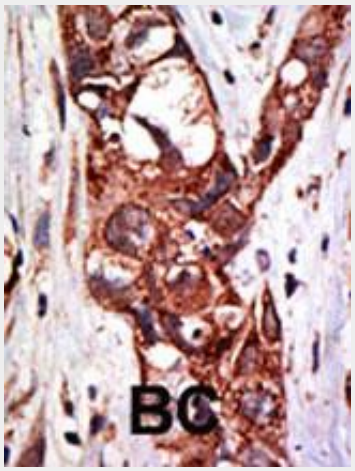


Western blot analysis of AOS1 (arrow) using rabbit polyclonal AOS1 Antibody (C-term) (Cat.#AP2511b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the AOS1 gene (Lane 2) (Origene Technologies).



AOS1 Antibody (V315) (Cat. #AP2511b) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the AOS1 antibody detected the AOS1 protein (arrow).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been

evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

SAE1 (AOS1) Antibody (C-term) - Background

The dimeric enzyme AOS1 acts as a an E1 ligase for SUMO1, SUMO2, SUMO3, and probably SUMO4. It mediates ATP-dependent activation of SUMO proteins and formation of a thioester with a conserved cysteine residue on SAE2.

SAE1 (AOS1) Antibody (C-term) - 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).