

**SAE1 (AOS1) Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2511b**

**Specification**

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

Application	WB, IHC-P,E
Primary Accession	<a href="#">Q9UBE0</a>
Other Accession	<a href="#">Q6AXQ0</a> , <a href="#">Q9R1T2</a> , <a href="#">A2VE14</a>
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

**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**

**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**

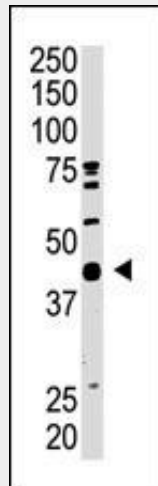
Expression level increases during S phase and drops in G2 phase (at protein level).

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

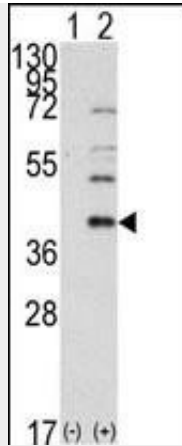
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

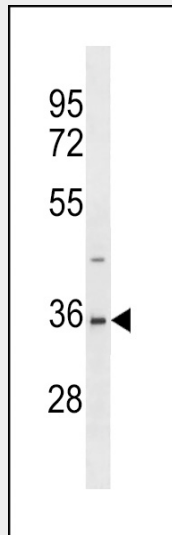
**SAE1 (AOS1) Antibody (C-term) - Images**



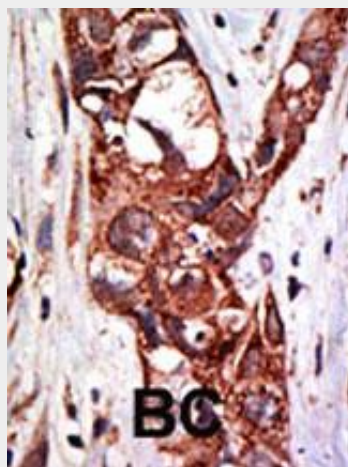
The AOS1 C-term Pab (Cat. #AP2511b) is used in Western blot to detect AOS1 in mouse heart tissue lysate.



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).