

**Anti-SAE1 Antibody**  
Rabbit polyclonal antibody to SAE1  
Catalog # AP59789**Specification**

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**Anti-SAE1 Antibody - Product Information**

Application	<b>WB, IF</b>
Primary Accession	<a href="#">O9UBE0</a>
Other Accession	<a href="#">O9R1T2</a>
Reactivity	<b>Human, Mouse, Rat, Monkey</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>38450</b>

**Anti-SAE1 Antibody - Additional Information****Gene ID** 10055**Other Names**

AOS1; SUA1; UBLE1A; SUMO-activating enzyme subunit 1; Ubiquitin-like 1-activating enzyme E1A

**Target/Specificity**

Recognizes endogenous levels of SAE1 protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)

IF~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-SAE1 Antibody - 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

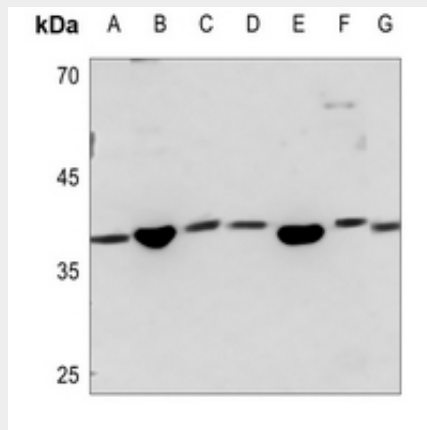
Expression level increases during S phase and drops in G2 phase (at protein level).

### Anti-SAE1 Antibody - Protocols

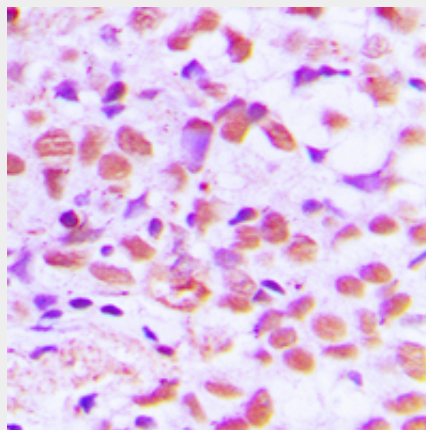
Provided below are standard protocols that you may find useful for product applications.

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

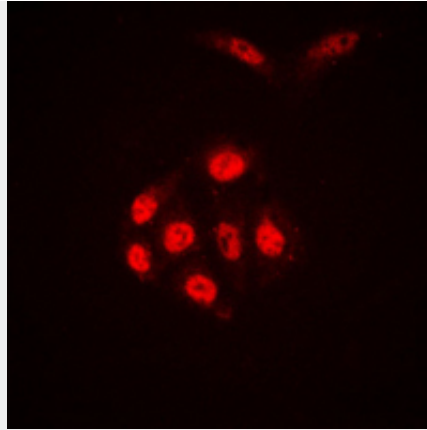
### Anti-SAE1 Antibody - Images



Western blot analysis of SAE1 expression in HEK293T (A), K562 (B), U2OS (C), mouse testis (D), mouse muscle (E), rat testis (F), rat muscle (G) whole cell lysates.



Immunohistochemical analysis of SAE1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of SAE1 staining in A431 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

#### **Anti-SAE1 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SAE1. The exact sequence is proprietary.