

**Goat Anti-SAE1 / AOS1 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1952a**

**Specification**

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**Goat Anti-SAE1 / AOS1 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q9UBE0</a>
Other Accession	<a href="#">NP_005491</a> , <a href="#">10055</a>
Reactivity	Human
Predicted	Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	38450

**Goat Anti-SAE1 / AOS1 Antibody - 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

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-SAE1 / AOS1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-SAE1 / AOS1 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).

**Goat Anti-SAE1 / AOS1 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](#)

**Goat Anti-SAE1 / AOS1 Antibody - Images**

AF1952a staining (1 µg/ml) of Jurkat lysate (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

**Goat Anti-SAE1 / AOS1 Antibody - Background**

Posttranslational modification of proteins by the addition of the small protein SUMO (see SUMO1; MIM 601912), or sumoylation, regulates protein structure and intracellular localization. SAE1 and UBA2 (MIM 613295) form a heterodimer that functions as a SUMO-activating enzyme for the sumoylation of proteins (Okuma et al., 1999 [PubMed 9920803]).

**Goat Anti-SAE1 / AOS1 Antibody - References**

Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931. A general approach for investigating enzymatic pathways and substrates for ubiquitin-like modifiers. Li T, et al. Arch Biochem Biophys, 2006 Sep 1. PMID 16620772. SUMO-1 controls the protein stability and the biological function of phosphatidylcholine. Klenk C,

et al. J Biol Chem, 2006 Mar 31. PMID 16421094. Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560. Towards a proteome-scale map of the human protein-protein interaction network. Rual JF, et al. Nature, 2005 Oct 20. PMID 16189514.