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

Specification

Goat Anti-SAE1 / AOS1 Antibody - Product Information

Application	**WB**
Primary Accession	Q9UBE0
Other Accession	NP_005491, 10055
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.

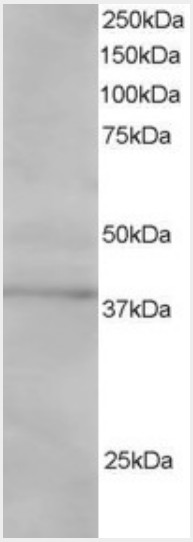
Tissue Location
Expression level increases during S phase and drops in G2 phase (at protein level).

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 Cytomety
- 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 phosducin. 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.