

Product Name: SAE1 Rabbit Polyclonal Antibody**Catalog #: APRab17573**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
Molecular Weight	38kDa

Antigen Information

Gene Name	SAE1
Alternative Names	SAE1; AOS1; SUA1; UBLE1A; SUMO-activating enzyme subunit 1; Ubiquitin-like 1-activating enzyme E1A
Gene ID	10055.0
SwissProt ID	Q9UBE0
Immunogen	The antiserum was produced against synthesized peptide derived from human AOS1. AA range:221-270

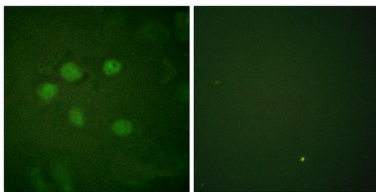
Background

SUMO1 activating enzyme subunit 1(SAE1) Homo sapiens 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]).[supplied by OMIM, Mar 2010],function:The dimeric enzyme acts as a 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.,pathway:Protein modification; protein sumoylation.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the ubiquitin-activating E1 family.,subunit:Heterodimer of SAE1 and SAE2. The complex binds SUMO proteins via SAE2.,tissue specificity:Expression level increases during S phase and drops in G2 phase (at protein level),

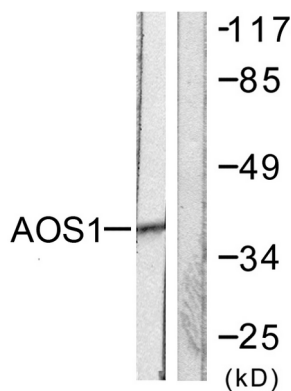
Research Area

Ubiquitin mediated proteolysis;

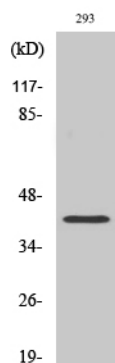
Image Data



Immunofluorescence analysis of HUVEC cells, using AOS1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, using AOS1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using SAE1 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA) .