



SAE1 Polyclonal Antibody

Catalog No	YP-Ab-02776
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	SAE1
Protein Name	SUMO-activating enzyme subunit 1
Immunogen	The antiserum was produced against synthesized peptide derived from human AOS1. AA range:221-270
Specificity	SAE1 Polyclonal Antibody detects endogenous levels of SAE1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	SAE1; AOS1; SUA1; UBLE1A; SUMO-activating enzyme subunit 1; Ubiquitin-like 1-activating enzyme E1A
Observed Band	38kD
Cell Pathway	Nucleus .
Tissue Specificity	Expression level increases during S phase and drops in G2 phase (at protein level).
Function	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).,
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],

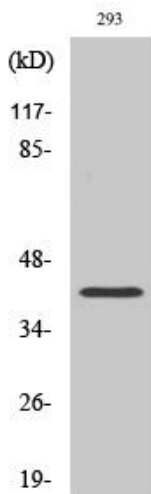
matters needing attention

Avoid repeated freezing and thawing!

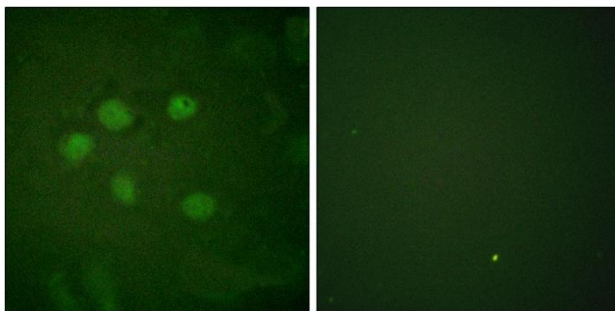
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

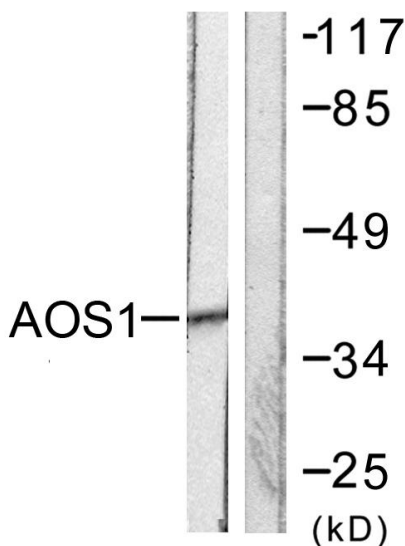
Products Images



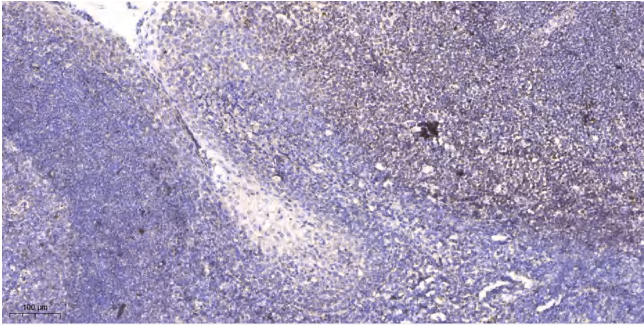
Western Blot analysis of various cells using SAE1 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



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.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).