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Anti-SAE1 Antibody

Rabbit polyclonal antibody to SAE1
Catalog # AP59789

Product Information

Application	WB, IF/IC, IHC
Primary Accession	Q9UBE0
Other Accession	Q9R1T2
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38450

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), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~WB (1/500 - 1/1000), IHC (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

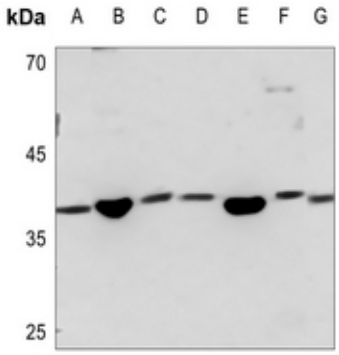
Protein Information

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).

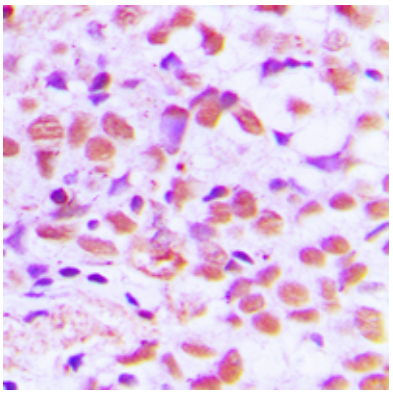
Background

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

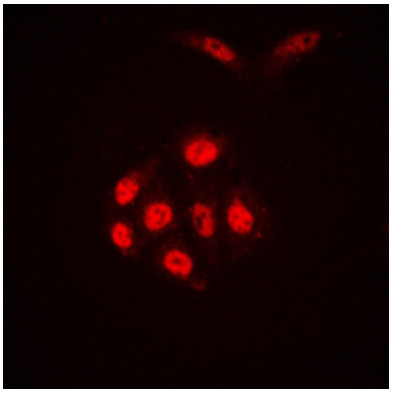
Images



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.