For Research Use Only

SAE1 Polyclonal antibody

Catalog Number:10229-1-AP 5 Publications



Basic Information

Catalog Number: GenBank Accession Number: 10229-1-AP BC000344 GeneID (NCBI): Size: 240 ug/ml 10055 **UNIPROT ID:** Source: Rabbit Q9UBE0 Full Name:

Purification Method: Antigen affinity purification Recommended Dilutions: WB 1:500-1:5000 IHC 1:50-1:500 IF/ICC 1:400-1:1600

Isotype:

SUMO1 activating enzyme subunit 1

Calculated MW: Immunogen Catalog Number: AG0275 38 kDa

Observed MW: 38 kDa

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA Cited Applications:

WB, IHC

Species Specificity: human, mouse, rat Cited Species:

buffer pH 6.0

human, mouse Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

Positive Controls:

WB: A549 cells, A431 cells, HEK-293 cells, HeLa cells IHC: human colon cancer tissue, human skin cancer

IF/ICC: HeLa cells,

Background Information

SAE1(SUMO-activating enzyme subunit 1) is also named as AOS1, SUA1, UBLE1A and belongs to the ubiquitinactivating E1 family. SAE1 has a calculated molecular mass of 38 kD. It had an apparent molecular mass of 40 kD by SDS-PAGE. SAE1 and UBA2 form a heterodimer that functions as a SUMO-activating enzyme for the sumoylation of proteins(PMID:9920803). Western blot analysis of synchronized HeLa cells detectes increased AOS1 expression as cells progressed through S phase, followed by a substantial decrease in G2 phase. Immunofluorescence analysis shows AOS1 and UBA2 distributed throughout nuclei, but they are excluded from nucleoli.(PMID:11481243).

Notable Publications

Author	Pubmed ID	Journal	Application
Lingjie Yan	36414671	Nat Commun	WB
Dong Chen	22342750	Curr Biol	WB
Yang Liu	35859792	Open Med (Wars)	IHC

Storage

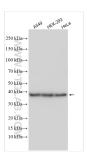
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

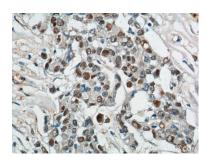
Selected Validation Data



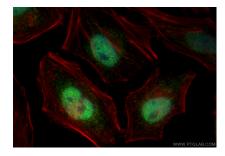
Various lysates were subjected to SDS PAGE followed by western blot with 10229-1-AP (SAE1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 10229-1-AP (SAE1 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 10229-1-AP (SAE1 Antibody) at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using SAE1 antibody (10229-1-AP) at dilution of 1:800 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).