

ARG59199 anti-UBA2 / SAE2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes UBA2 / SAE2
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	UBA2 / SAE2
Species	Human
Immunogen	Recombinant protein corresponding to E449-K564 of Human UBA2 / SAE2.
Conjugation	Un-conjugated
Alternate Names	EC 6.3.2.-; Anthracycline-associated resistance ARX; ARX; SUMO-activating enzyme subunit 2; SAE2; Ubiquitin-like modifier-activating enzyme 2; Ubiquitin-like 1-activating enzyme E1B; HRIHFB2115

Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	ICC/IF	1:200 - 1:1000
	IHC-P	0.5 - 1 µg/ml
	WB	0.1 - 0.5 µg/ml
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

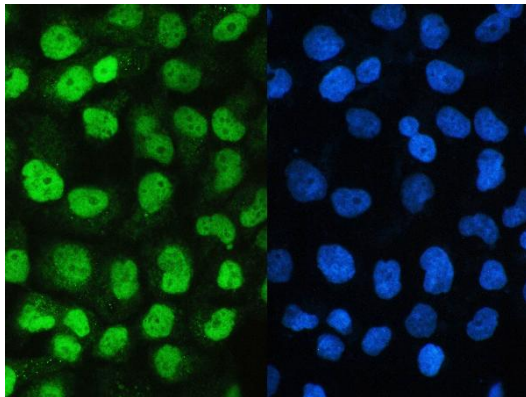
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

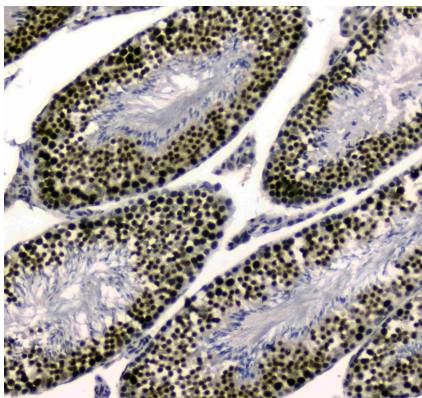
Gene Symbol	UBA2
Gene Full Name	ubiquitin-like modifier activating enzyme 2
Background	Posttranslational modification of proteins by the addition of the small protein SUMO (see SUMO1; MIM 601912), or sumoylation, regulates protein structure and intracellular localization. SAE1 (MIM 613294) and UBA2 form 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 heterodimer acts as a 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. [UniProt]
Calculated Mw	71 kDa
PTM	Sumoylated with SUMO1 and SUMO2/3 and by UBC9. Sumoylation at Lys-236 inhibits enzymatic activity. Sumoylation at the C-terminal lysine cluster plays an essential role in nuclear trafficking. [UniProt]
Cellular Localization	Cytoplasm. Nucleus. Note=Shuttles between the cytoplasm and the nucleus, sumoylation is required either for nuclear translocation or nuclear retention. [UniProt]

Images



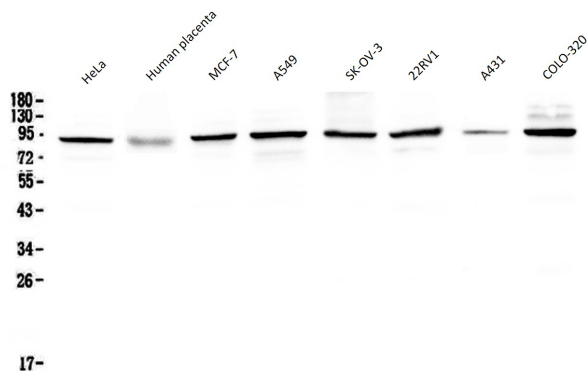
ARG59199 anti-UBA2 / SAE2 antibody ICC/IF image

Immunofluorescence: A431 cells were blocked with 10% goat serum and then stained with ARG59199 anti-UBA2 / SAE2 antibody (green) at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



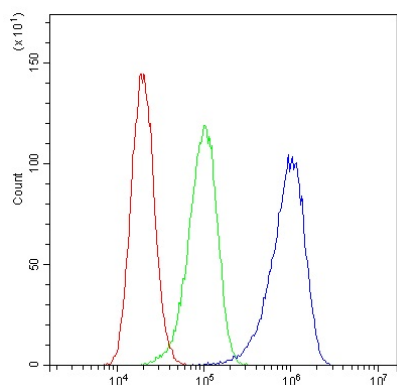
ARG59199 anti-UBA2 / SAE2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon cancer tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59199 anti-UBA2 / SAE2 antibody at 1 µg/ml dilution, overnight at 4°C.



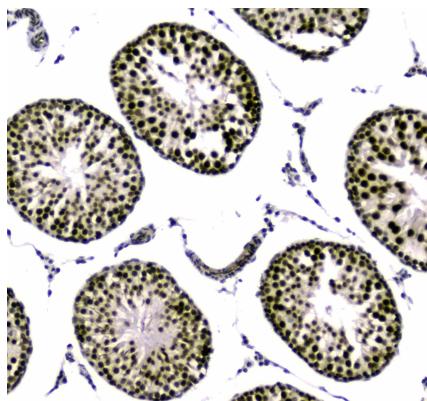
ARG59199 anti-UBA2 / SAE2 antibody WB image

Western blot: 50 µg of samples under reducing conditions. HeLa, Human placenta, MCF-7, A549, SK-OV-3, 22RV1, A431 and COLO-320 whole cell lysates stained with ARG59199 anti-UBA2 / SAE2 antibody at 0.5 µg/ml, overnight at 4°C.



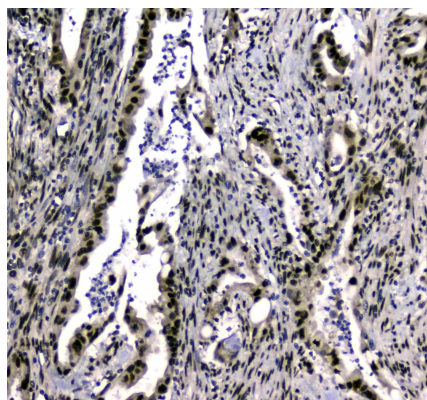
ARG59199 anti-UBA2 / SAE2 antibody FACS image

Flow Cytometry: A431 cells were blocked with 10% normal goat serum and then stained with ARG59199 anti-UBA2 / SAE2 antibody (blue) at 1 µg/10⁶ cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1 µg/10⁶ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



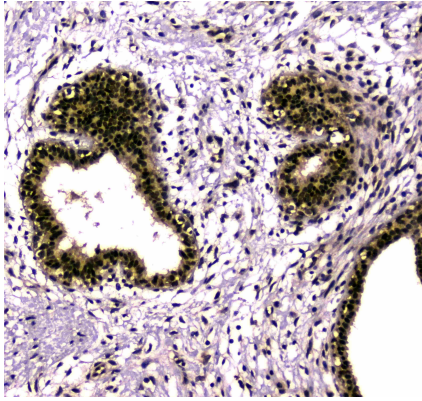
ARG59199 anti-UBA2 / SAE2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary cancer tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59199 anti-UBA2 / SAE2 antibody at 1 µg/ml dilution, overnight at 4°C.



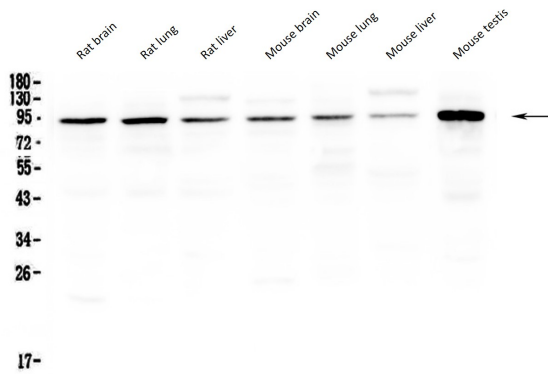
ARG59199 anti-UBA2 / SAE2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat testis tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59199 anti-UBA2 / SAE2 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG59199 anti-UBA2 / SAE2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse testis tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59199 anti-UBA2 / SAE2 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG59199 anti-UBA2 / SAE2 antibody WB image

Western blot: 50 µg of samples under reducing conditions. Rat brain, Rat lung, Rat liver, Mouse brain, Mouse lung, Mouse liver and Mouse testis lysates stained with ARG59199 anti-UBA2 / SAE2 antibody at 0.5 µg/ml, overnight at 4°C.