

Rabbit SAE2/UBA2 Polyclonal Antibody | anti-SAE2/UBA2 antibody

Anti-SAE2/UBA2 Picoband antibody

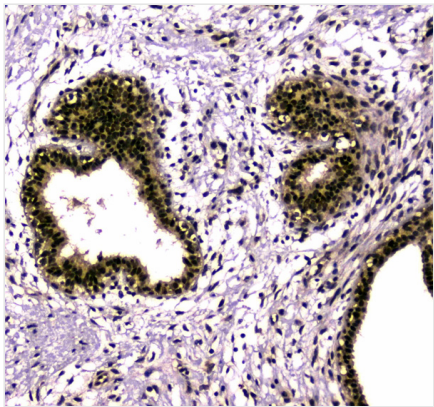
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19171	Rabbit	Human, Mouse, Rat No cross reactivity with other proteins.	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

SAE2/UBA2; Polyclonal Antibody; Anti-SAE2/UBA2 Picoband antibody; SUMO-activating enzyme subunit 2; Anthracycline-associated resistance ARX; Ubiquitin-like 1-activating enzyme E1B; Ubiquitin-like modifier-activating enzyme 2; UBA2; SAE2; UBLE1B; HRIHFB2115; anti-SAE2/UBA2 antibody

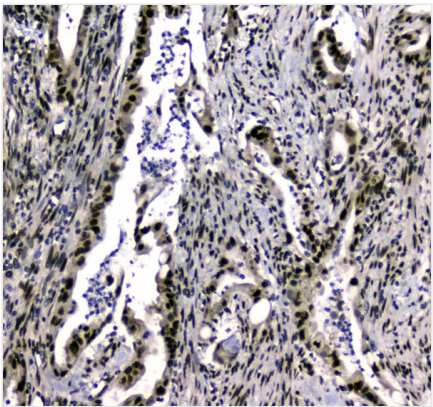
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat No cross reactivity with other proteins.
Clonality	Polyclonal
Form/Format	Lyophilized
Sequence Length	544
Applicable Applications for anti-SAE2/UBA2 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Application Notes	WB: 0.1-0.5µg/ml Immunohistochemistry (Paraffin-embedded Section): 0.5-1µg/ml Direct ELISA: 0.1-0.5µg/ml
Immunogen	E Coli-derived human SAE2/UBA2 recombinant protein (Position: E449-K564).
Subcellular Localization	Cytoplasm. Nucleus. Shuttles between the cytoplasm and the nucleus, sumoylation is required either for nuclear translocation or nuclear retention.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500µg/ml.
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



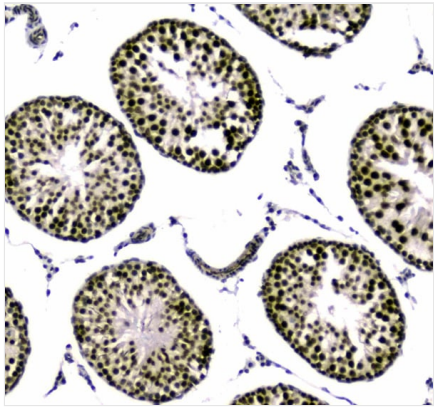
IHC (Immunohistochemistry)

Figure 6. IHC analysis of SAE2/UBA2 using anti-SAE2/UBA2 antibody (AAA19171).SAE2/UBA2 was detected in paraffin-embedded section of mouse testis tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SAE2/UBA2 Antibody (AAA19171) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



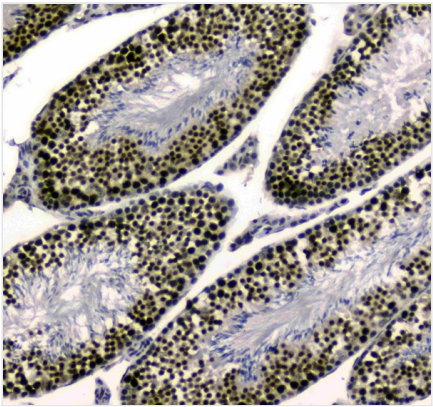
IHC (Immunohistochemistry)

Figure 5. IHC analysis of SAE2/UBA2 using anti-SAE2/UBA2 antibody (AAA19171).SAE2/UBA2 was detected in paraffin-embedded section of rat testis tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SAE2/UBA2 Antibody (AAA19171) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



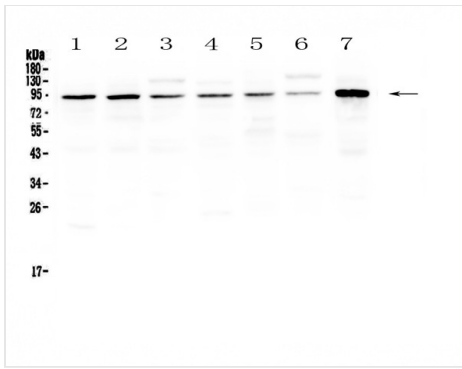
IHC (Immunohistochemistry)

Figure 4. IHC analysis of SAE2/UBA2 using anti-SAE2/UBA2 antibody (AAA19171).SAE2/UBA2 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SAE2/UBA2 Antibody (AAA19171) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



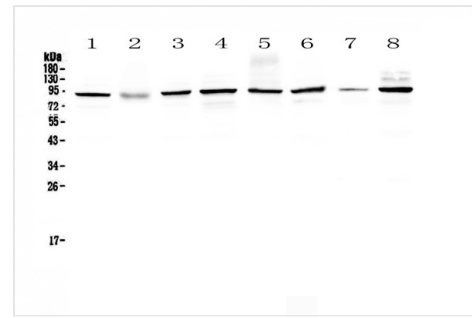
IHC (Immunohistochemistry)

Figure 3. IHC analysis of SAE2/UBA2 using anti-SAE2/UBA2 antibody (AAA19171).SAE2/UBA2 was detected in paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SAE2/UBA2 Antibody (AAA19171) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 2. Western blot analysis of SAE2/UBA2 using anti-SAE2/UBA2 antibody (AAA19171). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: rat lung tissue lysates, Lane 3: rat liver tissue lysates, Lane 4: mouse brain tissue lysates, Lane 5: mouse lung tissue lysates, Lane 6: mouse liver tissue lysates, Lane 7: mouse testis tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SAE2/UBA2 antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SAE2/UBA2 at approximately 90KD. The expected band size for SAE2/UBA2 is at 71KD.



WB (Western Blot)

Figure 1. Western blot analysis of SAE2/UBA2 using anti-SAE2/UBA2 antibody (AAA19171). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human placenta tissue lysates, Lane 3: human MCF-7 whole cell lysates, Lane 4: human A549 whole cell lysates, Lane 5: human SK-OV-3 whole cell lysates, Lane 6: human 22RV1 whole cell lysates, Lane 7: human A431 whole cell lysates, Lane 8: human COLO-320 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SAE2/UBA2 antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SAE2/UBA2 at approximately 90KD. The expected band size for SAE2/UBA2 is at 71KD.

ADDITIONAL INFORMATION

Related Product Information for anti-SAE2/UBA2 antibody

Description: Ubiquitin-like 1-activating enzyme E1B (UBLE1B) also known as SUMO-activating enzyme subunit 2 (SAE2) is an enzyme that in humans is encoded by the UBA2 gene. 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

Protein 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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4885649
NCBI GeneID	10054
NCBI Accession #	NP_005490.1
NCBI GenBank Nucleotide #	NM_005499.2
UniProt Accession #	Q9UBT2; O95605; Q59H87; Q6IBP6; Q9NTJ1; Q9UED2; B3KWB9
Molecular Weight	60,839 Da
NCBI Official Full Name	SUMO-activating enzyme subunit 2
NCBI Official Synonym Full Names	ubiquitin like modifier activating enzyme 2
NCBI Official Symbol	UBA2
NCBI Official Synonym Symbols	ARX; SAE2; HRIHFB2115
NCBI Protein Information	SUMO-activating enzyme subunit 2
UniProt Protein Name	SUMO-activating enzyme subunit 2
UniProt Gene Name	UBA2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/sae2-uba2-antibody-immunohistochemistry-western-blot-elisa/19171>