

**SAE2 (UBA2) Antibody (C-term E616)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1065b****Specification**

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**SAE2 (UBA2) Antibody (C-term E616) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">Q9UBT2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	601-631

**SAE2 (UBA2) Antibody (C-term E616) - Additional Information****Gene ID** 10054**Other Names**

SUMO-activating enzyme subunit 2, 632-, Anthracycline-associated resistance ARX, Ubiquitin-like 1-activating enzyme E1B, Ubiquitin-like modifier-activating enzyme 2, UBA2, SAE2, UBLE1B

**Target/Specificity**

This SAE2 (UBA2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 601-631 amino acids from the C-terminal region of human SAE2 (UBA2).

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

SAE2 (UBA2) Antibody (C-term E616) is for research use only and not for use in diagnostic or therapeutic procedures.

**SAE2 (UBA2) Antibody (C-term E616) - Protein Information****Name** UBA2**Synonyms** SAE2, UBLE1B

**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**

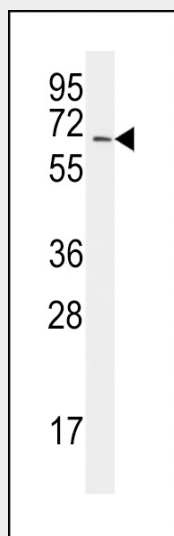
Cytoplasm. Nucleus. Note=Shuttles between the cytoplasm and the nucleus, sumoylation is required either for nuclear translocation or nuclear retention

**SAE2 (UBA2) Antibody (C-term E616) - Protocols**

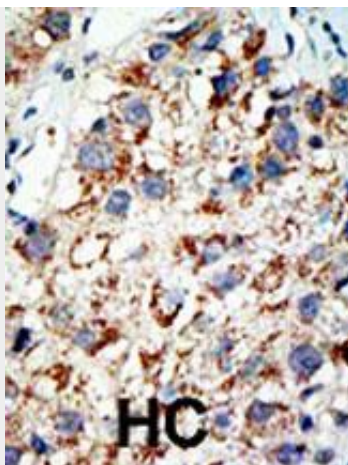
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**SAE2 (UBA2) Antibody (C-term E616) - Images**



The anti-UBA2 C-term E616 Antibody (Cat.#AP1065b) is used in Western blot to detect UBA2 in Jurkat lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

#### **SAE2 (UBA2) Antibody (C-term E616) - Background**

Ubiquitin is covalently attached to target proteins by a multienzymatic system consisting of E1 (ubiquitin-activating), E2 (ubiquitin-conjugating), and E3 (ubiquitin-ligating) enzymes. NEDD8, a ubiquitin-like protein, is conjugated to proteins in a manner analogous to ubiquitylation. beta-amyloid precursor protein-binding protein-1 (APPBP1) can bind to NEDD8 in rabbit reticulocyte lysates. However, since APPBP1 shows similarity to only the N-terminal domain of an E1 enzyme, it must interact with a protein showing similarity to the C-terminal region of E1s. By searching sequence databases, a cDNAs encoding UBA3 was identified as the human homolog of yeast Uba3. The predicted 442-amino acid UBA3 protein shares 43% sequence identity with yeast Uba3. In vitro, UBA3 formed a complex with APPBP1 and a thioester linkage with NEDD8. APPBP1/UBA3 complex may function as an E1-like enzyme for the activation of NEDD8.

#### **SAE2 (UBA2) Antibody (C-term E616) - References**

Desterro, J.M., et al., J. Biol. Chem. 274(15):10618-10624 (1999). Gong, L., et al., FEBS Lett. 448(1):185-189 (1999). Okuma, T., et al., Biochem. Biophys. Res. Commun. 254(3):693-698 (1999).