

SAE2 (UBA2) Antibody (C-term E616) Blocking peptide
Synthetic peptide
Catalog # BP1065b**Specification**

SAE2 (UBA2) Antibody (C-term E616) Blocking peptide - Product InformationPrimary Accession [Q9UBT2](#)**SAE2 (UBA2) Antibody (C-term E616) Blocking peptide - 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

The synthetic peptide sequence used to generate the antibody [AP1065b](/product/products/AP1065b) was selected from the C-term region of human UBA2 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SAE2 (UBA2) Antibody (C-term E616) Blocking peptide - 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) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

SAE2 (UBA2) Antibody (C-term E616) Blocking peptide - Images

SAE2 (UBA2) Antibody (C-term E616) Blocking peptide - 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 ubiquitinylation. 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) Blocking peptide - 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).