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

Synthetic peptide
Catalog # BP1065b

Specification

SAE2 (UBA2) Antibody (C-term E616) Blocking peptide - Product Information

Primary 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 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

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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).