

NAE1 (APPBP1) Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP7273e**Specification**

NAE1 (APPBP1) Antibody (C-term) Blocking peptide - Product Information

Primary Accession [O13564](#)
Other Accession [NP_003896](#)

NAE1 (APPBP1) Antibody (C-term) Blocking peptide - Additional Information

Gene ID 8883

Other Names

NEDD8-activating enzyme E1 regulatory subunit, Amyloid beta precursor protein-binding protein 1, 59 kDa, APP-BP1, Amyloid protein-binding protein 1, Proto-oncogene protein 1, NAE1, APPBP1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7273e](/product/products/AP7273e) was selected from the C-term region of human APPBP1. 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.

NAE1 (APPBP1) Antibody (C-term) Blocking peptide - Protein Information

Name NAE1

Synonyms APPBP1

Function

Regulatory subunit of the dimeric UBA3-NAE1 E1 enzyme. E1 activates NEDD8 by first adenylating its C-terminal glycine residue with ATP, thereafter linking this residue to the side chain of the catalytic cysteine, yielding a NEDD8-UBA3 thioester and free AMP. E1 finally transfers NEDD8 to the catalytic cysteine of UBE2M. Necessary for cell cycle progression through the S-M checkpoint. Overexpression of NAE1 causes apoptosis through deregulation of NEDD8 conjugation. The covalent attachment of NEDD8 to target proteins is known as 'neddylation' and the process is involved in the regulation of cell growth, viability and development.

Cellular Location

Cell membrane. Note=Colocalizes with APP in lipid rafts

Tissue Location

Ubiquitous in fetal tissues. Expressed throughout the adult brain.

NAE1 (APPBP1) Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

NAE1 (APPBP1) Antibody (C-term) Blocking peptide - Images**NAE1 (APPBP1) Antibody (C-term) Blocking peptide - Background**

APPBP1 binds to the beta-amyloid precursor protein. Beta-amyloid precursor protein is a cell surface protein with signal-transducing properties, and it is thought to play a role in the pathogenesis of Alzheimer's disease. In addition, this protein can form a heterodimer with UBE1C and bind and activate NEDD8, a ubiquitin-like protein. APPBP1 is required for cell cycle progression through the S/M checkpoint.

NAE1 (APPBP1) Antibody (C-term) Blocking peptide - References

Chen,Y., J. Cell Biol. 163 (1), 27-33 (2003)Chen,Y., J. Neurochem. 85 (3), 801-809 (2003)Walden,H., Nature 422 (6929), 330-334 (2003)Chow,N., J. Biol. Chem. 271 (19), 11339-11346 (1996)