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APPBP1 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP7273d

Specification

APPBP1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession	Q13564
Other Accession	NP_003896

APPBP1 Antibody (N-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 AP7273d was selected from the N-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.

APPBP1 Antibody (N-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.

APPBP1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

APPBP1 Antibody (N-term) Blocking Peptide - Images

APPBP1 Antibody (N-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.

APPBP1 Antibody (N-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)