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NAE1 (APPBP1) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7273b

Specification

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

Application	**WB, IHC-P,E**
Primary Accession	Q13564
Other Accession	Q9Z1A5, Q8VBW6, Q4R3L6, NP_003896
Reactivity	**Human**
Predicted	**Monkey, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**60246**
Antigen Region	**430-459**

NAE1 (APPBP1) Antibody (C-term) - 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
This NAE1 (APPBP1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 430-459 amino acids from the C-terminal region of human NAE1 (APPBP1).

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 purified through a protein G column, 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
NAE1 (APPBP1) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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

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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

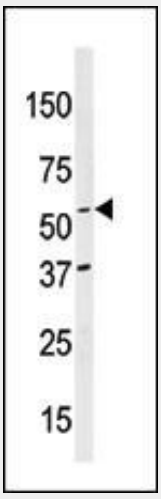
Tissue Location
Ubiquitous in fetal tissues. Expressed throughout the adult brain.

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

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

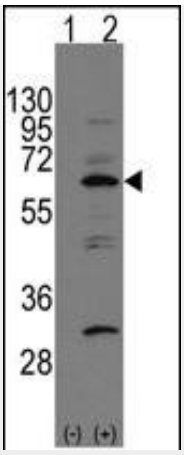
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NAE1 (APPBP1) Antibody (C-term) - Images

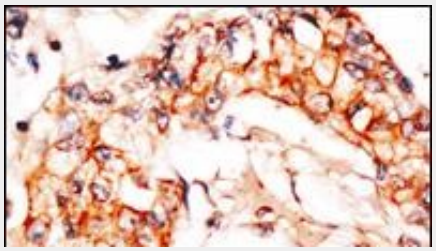


Western blot analysis of anti-APPBP1 Antibody (C-term) (Cat.#AP7273b) in mouse brain tissue lysates (35ug/lane). APPBP1(arrow) was detected using the purified Pab.

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Western blot analysis of APP-BP1(arrow) using rabbit polyclonal APP-BP1 Antibody (C-term) (Cat.#AP7273b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the APP-BP1 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human breast carcinoma reacted with anti-APPBP1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

NAE1 (APPBP1) Antibody (C-term) - Background

APPBP1 binds to the beta-amyloid precursor protein, a cell surface protein with signal-transducing properties 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. APPB1 is required for cell cycle progression through the S/M checkpoint.

NAE1 (APPBP1) Antibody (C-term) - 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)