10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# NAE1 (APPBP1) Antibody (C-term)

**Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP7273e**

## 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 | **452-482** |

### 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 452-482 amino acids from the C-terminal region of human NAE1 (APPBP1).

**Dilution**
WB~~1:1000
IHC-P~~1:10~50

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation 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

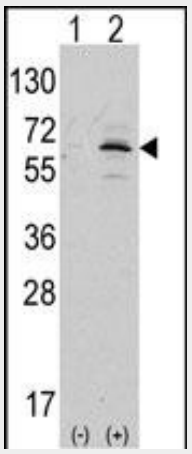
**Tissue Location**
Ubiquitous in fetal tissues. Expressed throughout the adult brain.

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

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

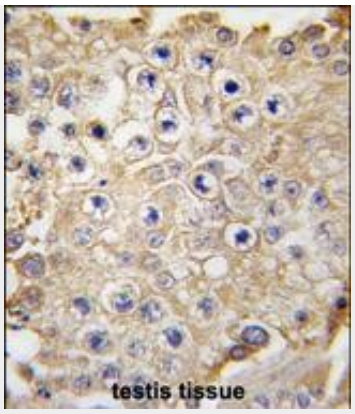
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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




Western blot analysis of APPBP1 (arrow) using rabbit polyclonal APPBP1 Antibody (C-term) (Cat.#AP7273e).293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the APPBP1 gene (Lane 2) (Origene Technologies).

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Formalin-fixed and paraffin-embedded human testis tissue reacted with APPBP1 antibody (C-term) (Cat.#AP7237e), 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. 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) - 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)