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Anti-APPBP1 Picoband Antibody
Catalog # ABO12030

Specification

Anti-APPBP1 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	Q13564
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for NEDD8-activating enzyme E1 regulatory subunit(NAE1) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-APPBP1 Picoband Antibody - 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

Calculated MW
60246 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Cell membrane . Colocalizes with APP in lipid rafts.

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

Protein Name
NEDD8-activating enzyme E1 regulatory subunit

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human APPBP1 recombinant protein (Position: E181-L534). Human APPBP1 shares 98% amino acid (aa) sequence identity with mouse APPBP1.

Purification

Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-APPBP1 Picoband Antibody - 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.

Anti-APPBP1 Picoband Antibody - 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

Anti-APPBP1 Picoband Antibody - Images

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Anti- APPBP1 Picoband antibody, ABO12030, Western blottingAll lanes: Anti APPBP1 (ABO12030) at 0.5ug/mlWB: Recombinant Human APPBP1 Protein 0.5ngPredicted bind size: 42KDObserved bind size: 42KD

Anti-APPBP1 Picoband Antibody - Background

NAE1 is also known as APPBP1. The protein encoded by this gene 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, the encoded protein can form a heterodimer with UBE1C and bind and activate NEDD8, a ubiquitin-like protein. This protein is required for cell cycle progression through the S/M checkpoint. Three transcript variants encoding different isoforms have been found for this gene.