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

Anti-APPBP1 Picoband Antibody

Catalog # ABO12030

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.

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
Application Details	Western blot, 0.1-0.5 □g/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. .
Source	Eukaryota
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.

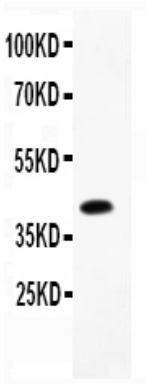
Protein Information

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.

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.

Images



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