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KD-Validated Anti-NAE1 Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI2087

Specification

KD-Validated Anti-NAE1 Mouse Monoclonal Antibody - Product Information

Application	**WB**
Primary Accession	Q13564
Reactivity	**Rat, Human**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**Predicted, 60 kDa, observed, 60 kDa KDa**
Gene Name	**NAE1**
Aliases	**NAE1; NEDD8 Activating Enzyme E1 Subunit 1; APP-BP1; APPBP1; Ula-1; Amyloid Beta Precursor Protein-Binding Protein 1, 59 KDa ; Amyloid Beta Precursor Protein Binding Protein 1, 59kDa; NEDD8-Activating Enzyme E1 Regulatory Subunit; Amyloid Protein-Binding Protein 1; Proto-Oncogene Protein 1; Amyloid Beta Precursor Protein-Binding Protein 1, 59kD; NEDD8-Activating Enzyme E1 Subunit; Protooncogene Protein 1; A-116A10.1; NEDFIH; HPP1**
Immunogen	**Recombinant protein of human NAE1**

KD-Validated Anti-NAE1 Mouse Monoclonal 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

KD-Validated Anti-NAE1 Mouse Monoclonal 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

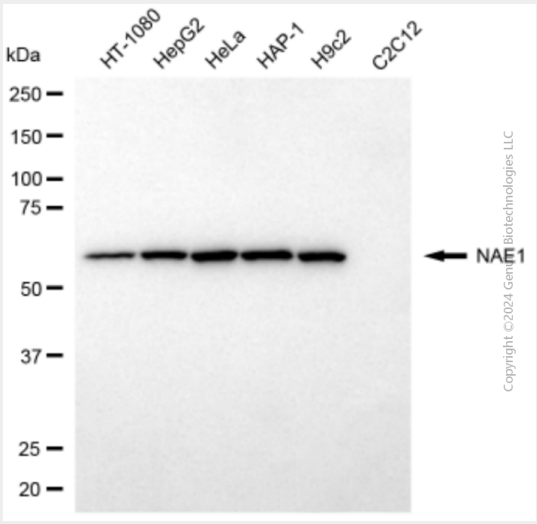
Tissue Location
Ubiquitous in fetal tissues. Expressed throughout the adult brain.

KD-Validated Anti-NAE1 Mouse Monoclonal Antibody - Protocols

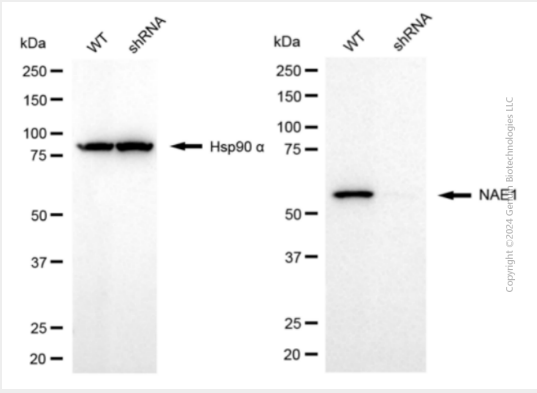
Provided below are standard protocols that you may find useful for product applications.

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

KD-Validated Anti-NAE1 Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-NAE1 antibody (Cat#AGI2087). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-NAE1 antibody (Cat#AGI2087, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



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Western blotting analysis using anti-NAE1 antibody (Cat#AGI2087). NAE1 expression in wild-type (WT) and NAE1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-NAE1 antibody (Cat#AGI2087, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.