

APPBP2 Antibody

Catalog # ASC11724

Specification

APPBP2 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity

Host Clonality Isotype

Calculated MW

Application Notes

WB, IHC, IF 092624

NP_006371, 18104962 Human, Mouse, Rat

Rabbit Polyclonal

IgG

Predicted: 64 kDa

Observed: 57 kDa KDa

APPBP2 antibody can be used for detection of APPBP2 by Western blot at 0.5 - 1 μg/ml.

Antibody can also be used for

Immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

APPBP2 Antibody - Additional Information

Gene ID **10513**

Target/Specificity

APPBP2; APPBP2 antibody is human, mouse and rat reactive. At least two isoforms of APPBP2 are known to exist; this antibody will detect both isoforms.

Reconstitution & Storage

APPBP2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

APPBP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

APPBP2 Antibody - Protein Information

Name APPBP2 {ECO:0000303|PubMed:26138980, ECO:0000312|HGNC:HGNC:622}

Function

Substrate-recognition component of a Cul2-RING (CRL2) E3 ubiquitin-protein ligase complex of the DesCEND (destruction via C-end degrons) pathway, which recognizes a C-degron located at the extreme C terminus of target proteins, leading to their ubiquitination and degradation (PubMed:29779948, PubMed:29775578). The C-degron recognized by the DesCEND pathway is usually a motif of less than ten residues and can be present in full-length proteins, truncated proteins or proteolytically cleaved forms (PubMed:29779948, PubMed:29775578). The



CRL2(APPBP2) complex specifically recognizes proteins with a -Arg-Xaa- Xaa-Gly degron at the C-terminus, leading to their ubiquitination and degradation (PubMed:29779948, PubMed:29775578). The CRL2(APPBP2) complex mediates ubiquitination and degradation of truncated SELENOV selenoproteins produced by failed UGA/Sec decoding, which end with a -Arg-Xaa-Xaa-Gly degron (PubMed:26138980). May play a role in intracellular protein transport: may be involved in the translocation of APP along microtubules toward the cell surface (PubMed:9843960).

Cellular Location

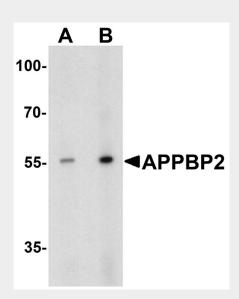
Nucleus. Cytoplasm, cytoskeleton. Membrane; Peripheral membrane protein. Note=Associated with membranes and microtubules.

APPBP2 Antibody - Protocols

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

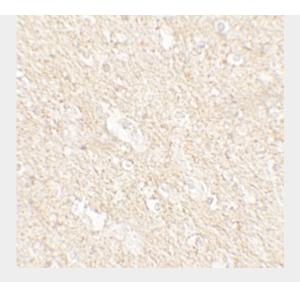
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

APPBP2 Antibody - Images

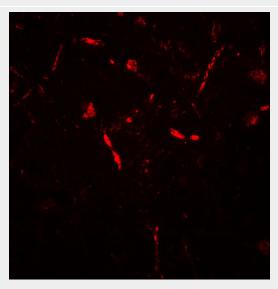


Western blot analysis of APPBP2 in human brain tissue lysate with APPBP2 antibody at (A) 0.5 and (B) 1 μ g/ml.





Immunohistochemistry of APPBP2 in human brain tissue with APPBP2 antibody at 5 μg/mL.



Immunofluorescence of APPBP2 in human brain tissue with APPBP2 antibody at 20 µg/mL.

APPBP2 Antibody - Background

The amyloid beta precursor protein (cytoplasmic tail) binding protein 2 (APPBP2), also known as PAT1, interacts with microtubules and is functionally associated with beta-amyloid precursor protein transport and/or processing (1). The 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 (2). APPBP2 has been found to be highly expressed in breast cancer (3).

APPBP2 Antibody - References

Zheng P, Eastman J, Vande Pol S, et al. PAT1, a microtubule-interacting protein, recognizes the basolateral sorting signal of amyloid precursor protein. Proc. Natl. Acad. Sci. USA 1994; 95:14745-50.

Selkoe DJ. Cell biology of the amyloid beta-protein precursor and the mechanism of Alzheimer's disease. Annu. Rev. Cell Biol. 1994; 10:373-403.

Li J, Yang Y, Peng Y, et al. Oncogenic properties of PPM1D located within a breast cancer amplification epicenter at 17q23. Nat. Genet. 2002; 31:133-4.