

**APPBP2 Antibody**  
**Catalog # ASC11724****Specification****APPBP2 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">Q92624</a>
Other Accession	<a href="#">NP_006371</a> , <a href="#">18104962</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 64 kDa

Application Notes	<b>Observed: 57 kDa KDa</b> <b>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 µg/mL. For immunofluorescence start at 20 µg/mL.</b>
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**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:<a href="http://www.uniprot.org/citations/29779948" target="\_blank">29779948</a>, PubMed:<a href="http://www.uniprot.org/citations/29775578" target="\_blank">29775578</a>). 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:<a href="http://www.uniprot.org/citations/29779948" target="\_blank">29779948</a>, PubMed:<a href="http://www.uniprot.org/citations/29775578" target="\_blank">29775578</a>). 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:<a href="http://www.uniprot.org/citations/29779948" target="\_blank">29779948</a>, PubMed:<a href="http://www.uniprot.org/citations/29775578" target="\_blank">29775578</a>). 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:<a href="http://www.uniprot.org/citations/26138980" target="\_blank">26138980</a>). May play a role in intracellular protein transport: may be involved in the translocation of APP along microtubules toward the cell surface (PubMed:<a href="http://www.uniprot.org/citations/9843960" target="\_blank">9843960</a>).

### Cellular Location

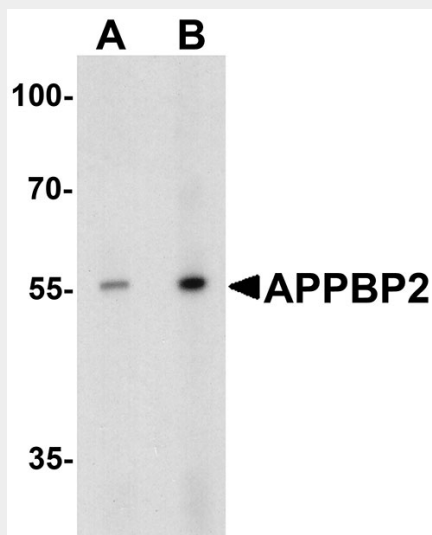
Nucleus. Cytoplasm, cytoskeleton. Membrane; Peripheral membrane protein. Note=Associated with membranes and microtubules.

### APPBP2 Antibody - Protocols

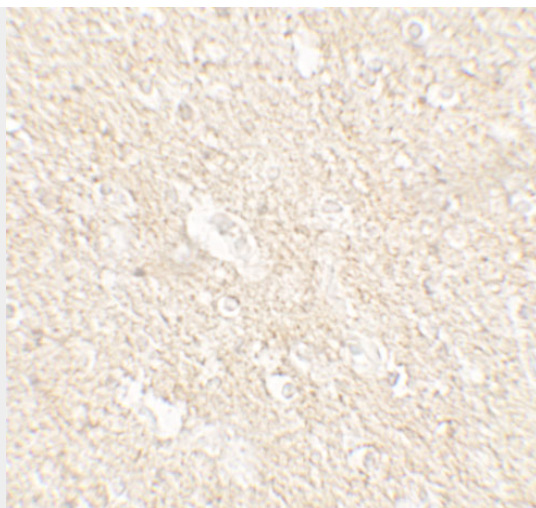
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

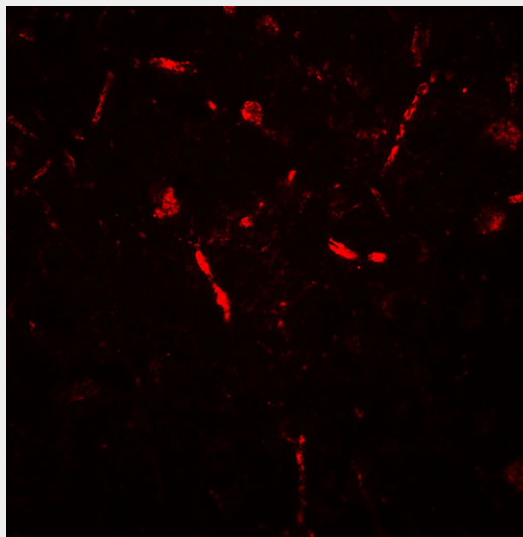
### APPBP2 Antibody - Images



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