

BIN1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14348c

Specification

BIN1 Antibody (Center) - Product Information

Application	WB, IHC-P,E
Primary Accession	O00499
Other Accession	O08839 , O08539 , NP_647595.1 , NP_647594.1 , NP_004296.1
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	360-389

BIN1 Antibody (Center) - Additional Information

Gene ID 274

Other Names

Myc box-dependent-interacting protein 1, Amphiphysin II, Amphiphysin-like protein, Box-dependent myc-interacting protein 1, Bridging integrator 1, BIN1, AMPHL

Target/Specificity

This BIN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 360-389 amino acids of human BIN1(O00499-1).

Dilution

WB~~1:1000
IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

BIN1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

BIN1 Antibody (Center) - Protein Information

Name BIN1

Synonyms AMPHL

Function Is a key player in the control of plasma membrane curvature, membrane shaping and membrane remodeling. Required in muscle cells for the formation of T-tubules, tubular invaginations of the plasma membrane that function in depolarization-contraction coupling (PubMed:[24755653](#)). Is a negative regulator of endocytosis (By similarity). Is also involved in the regulation of intracellular vesicles sorting, modulation of BACE1 trafficking and the control of amyloid-beta production (PubMed:[27179792](#)). In neuronal circuits, endocytosis regulation may influence the internalization of PHF-tau aggregates (By similarity). May be involved in the regulation of MYC activity and the control cell proliferation (PubMed:[8782822](#)). Has actin bundling activity and stabilizes actin filaments against depolymerization in vitro (PubMed:[28893863](#)).

Cellular Location

[Isoform BIN1]: Nucleus. Cytoplasm Endosome {ECO:0000250|UniProtKB:O08539}. Cell membrane, sarcolemma, T- tubule {ECO:0000250|UniProtKB:O08839}

Tissue Location

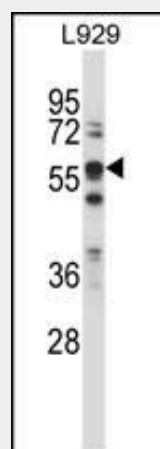
Ubiquitous. Highest expression in the brain and muscle (PubMed:9182667). Expressed in oligodendrocytes (PubMed:27488240). Isoform IIA is expressed only in the brain, where it is detected in the gray matter, but not in the white matter (PubMed:27488240). Isoform BIN1 is widely expressed with highest expression in skeletal muscle.

BIN1 Antibody (Center) - Protocols

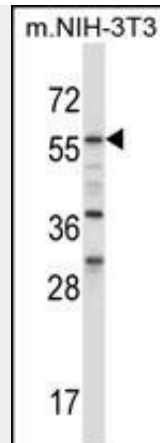
Provided below are standard protocols that you may find useful for product applications.

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

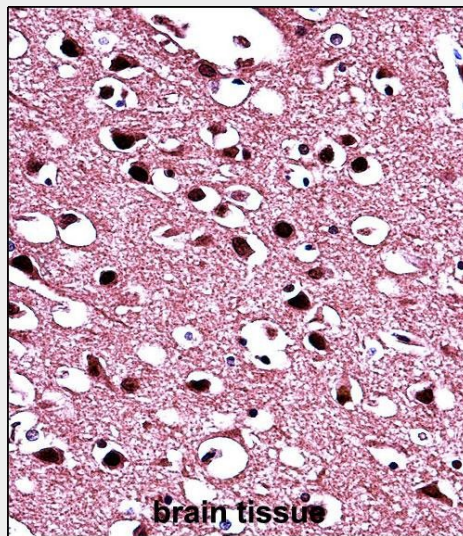
BIN1 Antibody (Center) - Images



BIN1 Antibody (Center) (Cat. #AP14348c) western blot analysis in L929 cell line lysates (35ug/lane). This demonstrates the BIN1 antibody detected the BIN1 protein (arrow).



BIN1 Antibody (Center) (Cat. #AP14348c) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane). This demonstrates the BIN1 antibody detected the BIN1 protein (arrow).



BIN1 Antibody (Center) (Cat. #AP14348c) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of BIN1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

BIN1 Antibody (Center) - Background

This gene encodes several isoforms of a nucleocytoplasmic adaptor protein, one of which was initially identified as a MYC-interacting protein with features of a tumor suppressor. Isoforms that are expressed in the central nervous system may be involved in synaptic vesicle endocytosis and may interact with dynamin, synaptotagmin, endophilin, and clathrin. Isoforms that are expressed in muscle and ubiquitously expressed isoforms localize to the cytoplasm and nucleus and activate a caspase-independent apoptotic process. Studies in mouse suggest that this gene plays an important role in cardiac muscle development. Alternate splicing of the gene results in ten transcript variants encoding different isoforms. Aberrant splice variants expressed in tumor cell lines have also been described.

BIN1 Antibody (Center) - References

Biffi, A., et al. Arch. Neurol. 67(6):677-685(2010) Seshadri, S., et al. JAMA 303(18):1832-1840(2010)
Yoshida, T., et al. Int. J. Mol. Med. 25(4):649-656(2010) Claeys, K.G., et al. Neurology
74(6):519-521(2010) Hong, T.T., et al. PLoS Biol. 8 (2), E1000312 (2010) :