Product name:	Amphiphysin II Rabbit Polyclonal Antibody
Cat number:	ABN06838
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from the C-terminal region of human Amphiphysin II.
Reactivity:	Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	64kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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, synaptojanin, 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 several transcript variants encoding different isoforms. Aberrant splice variants expressed in tumor cell lines have also been described. [provided by RefSeq, Mar 2016],alternative products:Additional isoforms seem to exist,disease:Defects in BIN1 are the cause of centronuclear myopathy autosomal recessive (ARCNM) [MIM:255200]; also known as autosomal recessive myotubular myopathy. Centronuclear myopathies are congenital muscle disorders characterized by progressive muscular weakness and wasting involving mainly limb girdle, trunk, and neck muscles. It may also affect distal muscles. Weakness may be present during childhood or adolescence or may not become evident until the third decade of life. Ptosis is a frequent clinical feature. The most prominent histopathologic features include high frequency of centrally located nuclei in muscle fibers not secondary to regeneration, radial arrangement of sarcoplasmic strands around the central nuclei, and predominance and hypotrophy of type 1 fibers.,function:May be involved in regulation of synaptic vesicle endocytosis. May act as a tumor suppressor and inhibits malignant cell transformation.,PTM:Phosphorylated by protein kinase C.,similarity:Contains 1 BAR domain.,similarity:Contains 1 SH3 domain.,subunit:Heterodimer with AMPH. Binds SH3GLB1 (By similarity). Binds to SYNJ1 and DNM1 through its SH3 domain, and to clathrin through a region outside of the SH3 domain. Also binds AP2A2. Interacts with the N-terminal transactivation domain of MYC in a manner requiring the integrity of the conserved MYC box regions 1 and 2. Interacts with BIN2. Interacts with HCV NS5A through its SH3 domain.,tissue specificity:Ubiquitous. Highest expression in the brain and muscle. Isoform IIA is expressed only in the brain where it is concentrated in axon initial segments and nodes of Ranvier. Isoform BIN1 is widely expressed with highest expression in skeletal muscle.,