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KD-Validated Anti-Bridging integrator 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1166

Product Information

Application	WB, FC
Primary Accession	O00499
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB3010
Calculated MW	64699
Gene Name	BIN1
Aliases	BIN1; Bridging Integrator 1; Myc Box-Dependent-Interacting Protein 1; Amphiphysin II; SH3P9; AMPH2; AMPHL; Box-Dependent Myc-Interacting Protein 1; Amphiphysin-Like Protein; Amphiphysin 2; Box Dependant MYC Interacting Protein 1; CNM2
Immunogen	A synthesized peptide derived from human BIN1

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

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.