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KD-Validated Anti-Vesicle associated membrane protein 2 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2317

Product Information

Application	WB, FC, ICC
Primary Accession	P63027
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB 1855
Calculated MW	12663
Gene Name	VAMP2
Aliases	Vesicle Associated Membrane Protein 2; Vesicle-Associated Membrane Protein 2; Synaptobrevin 2; VAMP-2; SYB2; Synaptobrevin-2
Immunogen	A synthesized peptide derived from human VAMP2

Additional Information

Gene ID	6844
Other Names	Vesicle-associated membrane protein 2, VAMP-2, Synaptobrevin-2, VAMP2 (HGNC:12643), SYB2

Protein Information

Name	VAMP2 (HGNC:12643)
Function	SNAREs (soluble N-ethylmaleimide-sensitive factor-attachment protein receptors) are essential proteins for intracellular membrane fusion. SNAREs localized on opposing membranes assemble to form a trans-SNARE complex, an extended, parallel four-helix bundle whose assembly releases energy that drives membrane fusion. The core SNARE complex typically consists of four alpha-helical domains, three from target membrane SNAREs (t-SNAREs) and one from a vesicle SNARE (v- SNARE) (PubMed:10036234, PubMed:30929742). VAMP2 is a v-SNARE assembling into a SNARE complex with the t-SNAREs SNAP25 and STX1A to mediate the fusion of synaptic vesicles with the presynaptic plasma membrane in neurotransmitter release (PubMed:30929742). Also functions in compensatory endocytosis for synaptic vesicle recycling (By similarity). In adipocytes, it is involved in the insulin-dependent exocytosis of GLUT4 storage vesicles (By similarity). Independently of its SNARE activity, it could modulate the gating characteristics of the delayed rectifier voltage-dependent potassium channel KCNB1 (By similarity).

Cellular Location	Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Single-pass type IV membrane protein. Cell membrane {ECO:0000250|UniProtKB:P63045}. Note=Colocalizes with PRKCZ and WDFY2 in intracellular vesicles (PubMed:17313651)
Tissue Location	Nervous system and skeletal muscle.

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