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VAMP4 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20234c

Product Information

Application	WB, E
Primary Accession	O75379
Other Accession	O70480, Q32L97, NP_003753.2
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42648
Calculated MW	16397
Antigen Region	61-90

Additional Information

Gene ID	8674
Other Names	Vesicle-associated membrane protein 4, VAMP-4, VAMP4
Target/Specificity	This VAMP4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 61-90 amino acids from the Central region of human VAMP4.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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	VAMP4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	VAMP4 (HGNC:12645)
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). VAMP4 is a v-SNARE that functions in vesicle fusion with the plasma membrane. In skeletal muscle satellite cells, VAMP4 cooperates with its cognate SNAREs STX11 and SNAP23 to facilitate CD36 vesicular transport from endosomes to the plasma membrane, an essential step in muscle regeneration (By similarity).
Cellular Location	Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:O70480}; Single-pass type IV membrane protein. Note=Associated with trans Golgi network (TGN) and newly formed immature secretory granules (ISG). Not found on the mature secretory organelles.

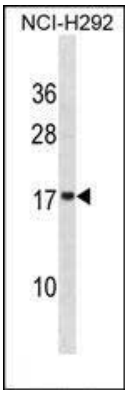
Background

Synaptobrevins/VAMPs, syntaxins, and the 25-kD synaptosomal-associated protein SNAP25 are the main components of a protein complex involved in the docking and/or fusion of synaptic vesicles with the presynaptic membrane. The protein encoded by this gene is a member of the vesicle-associated membrane protein (VAMP)/synaptobrevin family. This protein may play a role in trans-Golgi network-to-endosome transport.

References

Olsen, J.V., et al. Cell 127(3):635-648(2006)
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Sabra, M.M., et al. Mol. Genet. Metab. 85(2):133-139(2005)
Ballif, B.A., et al. Mol. Cell Proteomics 3(11):1093-1101(2004)
Hinners, I., et al. EMBO Rep. 4(12):1182-1189(2003)

Images



VAMP4 Antibody (Center) (Cat. #AP20234c) western blot analysis in NCI-H292 cell line lysates (35ug/lane).This demonstrates the VAMP4 antibody detected the VAMP4 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.