

VAMP2 Antibody

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	13	Rabbit	#P63027	6844
Product Usage Information	Application		Dilution			
	Western Blotting		1:1000			
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.					
Specificity/Sensitivity	VAMP2 antibody recognizes endogenous levels of total VAMP2 protein.					
Species predicted to react based on 100% sequence homology	Monkey, Bovine					
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human VAMP2 protein. Antibodies are purified by protein A and peptide affinity chromatography.					
Background	Vesicle-associated membrane protein 2 (VAMP2, also called synaptobrevin) is part of the R-soluble N-ethylmaleimide-sensitive factor attachment protein receptor (SNARE) complex (1). The SNARE complex is involved in vesicular transport and membrane fusion, a process regulated by calcium (2). In neurons, VAMP2 is predominantly inserted in presynaptic vesicle membranes. Assembly of VAMP2 with the plasma membrane SNAREs syntaxin 1 and SNAP25 is a key event necessary for membrane fusion and neurotransmitter release (2). In addition to this important function, VAMP2 is also involved in granule exocytosis in neutrophils (3) and release of bioactive peptides from cardiac myocytes (4) and juxtaglomerular cells (5).					
Background References	<ol style="list-style-type: none"> 1. Baumert, M. et al. (1989) <i>EMBO J</i> 8, 379-84. 2. Sudhof, T.C. (2004) <i>Annu Rev Neurosci</i> 27, 509-47. 3. Mollinedo, F. et al. (2003) <i>J Immunol</i> 170, 1034-42. 4. Ferlito, M. et al. (2010) <i>J Mol Cell Cardiol</i> 49, 791-800. 5. Mendez, M. et al. (2011) <i>J Biol Chem</i> 286, 28608-18. 					

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	W: Western Blotting
Cross-Reactivity Key	H: Human M: Mouse R: Rat
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