

#13508 Store at -20°C

## VAMP2 (D6O1A) Rabbit mAb



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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:
WB, IP, IHC-P, IF-F, IF-IC	H M R	Endogenous	13	Rabbit	#P63027	6844

### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation  
Immunohistochemistry (Paraffin)  
Immunofluorescence (Frozen)  
Immunofluorescence (Immunocytochemistry)

#### Dilution

1:1000  
1:50  
1:1600 - 1:6400  
1:2000  
1:250

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #50423.

### Specificity / Sensitivity

VAMP2 (D6O1A) Rabbit mAb recognizes endogenous levels of total VAMP2 protein. This antibody does not cross-react with VAMP1 protein and recognizes VAMP2 protein by IF-IC analysis in mouse and rat cells.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the amino terminus of human VAMP2 protein.

### 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

1. Baumert, M. et al. (1989) *EMBO J* 8, 379-84.
2. Sudhof, T.C. (2004) *Annu Rev Neurosci* 27, 509-47.
3. Mollinedo, F. et al. (2003) *J Immunol* 170, 1034-42.
4. Ferlito, M. et al. (2010) *J Mol Cell Cardiol* 49, 791-800.
5. Mendez, M. et al. (2011) *J Biol Chem* 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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**WB:** Western Blotting **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin)  
**IF-F:** Immunofluorescence (Frozen) **IF-IC:** Immunofluorescence (Immunocytochemistry)

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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