Revision 1

Store at -20C

#13060

# VAMP8 Antibody

Cell Signaling TECHNOLOGY®

**Orders:** 877-616-CELL (2355)
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**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 | Endogenous | 15 | Rabbit | #Q9BV40 | 8673 |

## 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

VAMP8 Antibody recognizes endogenous levels of total VAMP8 protein.

## Species predicted to react based on 100% sequence homology

Monkey, Dog

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val31 of human VAMP8 protein. Antibodies are purified by protein A and peptide affinity chromatography.

## Background

Proteins in the soluble N-ethylmaleimide-sensitive factor attachment protein receptor (SNARE) complex are integral membrane proteins involved in vesicle transport and membrane fusion by pairing of vesicular SNAREs (v-SNAREs) with cognate target SNAREs (t-SNAREs) (reviewed in 1,2). Vesicle associated membrane protein 8 (VAMP8), also known as endobrevin, is a v-SNARE originally found preferentially localized to early endosomes (3). VAMP8 knockout mice did not show abnormal endosomal vesicular trafficking, perhaps having a redundant role with other VAMP family members (4). Instead, research studies have shown that VAMP8 is widely expressed in exocrine tissues and has a critical role in the exocytosis pathways of a variety of cells (4-9). In addition, lysosome localized VAMP8 has been shown to play a role in autophagosome/lysosome fusion during antimicrobial (xenophagy) and canonical starvation induced autophagy (5).

## Background References

1. Jena, B.P. (2011) *Adv Exp Med Biol* 713, 13-32.
2. Kasai, H. et al. (2012) *Physiol Rev* 92, 1915-64.
3. Wong, S.H. et al. (1998) *Mol Biol Cell* 9, 1549-63.
4. Wang, C.C. et al. (2007) *Mol Biol Cell* 18, 1056-63.
5. Furuta, N. et al. (2010) *Mol Biol Cell* 21, 1001-10.
6. Nagamatsu, S. et al. (2001) *J Cell Sci* 114, 219-227.
7. Okayama, M. et al. (2009) *Cell Struct Funct* 34, 115-25.
8. Jones, L.C. et al. (2012) *J Physiol* 590, 545-62.
9. Wang, C.C. et al. (2004) *Dev Cell* 7, 359-71.

## 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

**W:** Western Blotting

## Cross-Reactivity Key

**H:** Human **M:** Mouse

## Trademarks and Patents



## Limited Uses

terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.