

Product Information

sigma-aldrich.com

3050 Spruce Street, Saint Louis, MO 63103 USA

Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757

email: techservice@sial.com sigma-aldrich.com

Anti-VAMP8

produced in rabbit, affinity isolated antibody

Catalog Number **V7514**

Product Description

Anti-VAMP8 is produced in rabbit using as immunogen, a synthetic peptide corresponding to amino acids 38-56 of human VAMP8 (GenelD: 8673), conjugated to KLH. This sequence is highly conserved in mouse and rat VAMP8, single amino acid substitution. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-VAMP8 specifically recognizes human VAMP8 by immunoblotting (~14 kDa). Staining of the VAMP8 band is specifically inhibited by the immunizing peptide.

Trafficking between intracellular membrane compartments and exocytosis are largely mediated by vesicular transport. These processes are regulated by a family of integral membrane proteins called soluble NSF attachment protein receptors (SNAREs) present on the vesicles or granules (v-SNAREs) or on the target membrane (t-SNAREs).¹ The v-SNAREs and the t-SNAREs form a heteromeric complex that mediates membrane fusion and thus granule cargo release.² VAMP-8/endobrevin was originally identified as an endosomal v-SNARE involved in fusion between early and late endosomes.^{3,4} It can interact with syntaxin-7, syntaxin-8, and Vti1b to form an endosomal fusion complex.⁵ VAMP-8 interacts with syntaxin-2 and is involved in the terminal step of cytokinesis in mammalian cells.⁶ VAMP8 is the major vesicular v-SNARE of zymogen granules from pancreatic acinar cells, and has been recently shown to be a general vesicular SNARE for regulated exocytosis of the exocrine system.⁷ VAMP-8 has been shown to be the primary v-SNARE for the platelet release reaction.⁸

Reagents

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.5 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 1-2 µg/ml is recommended using HEK-293T cells expressing human VAMP8.

Note: In order to obtain best results and assay sensitivity in different techniques and preparations we recommend determining optimal working concentrations by titration.

References

1. Ungar, D., and Hughson, F.M., *Annu. Rev. Cell Dev. Biol.*, **19**, 493-517 (2003).
2. Weber, T., et al., *Cell*, **92**, 759-772 (1998).
3. Wong, S.H., et al., *Mol. Biol. Cell*, **9**, 1549-1563 (1998).
4. Antonin, W., et al., *EMBO J.*, **19**, 6453-6464 (2000).
5. Antonin, W., et al., *Mol. Biol. Cell*, **11**, 3289-3298 (2000).
6. Low, S.H., et al., *Dev. Cell*, **4**, 753-759 (2003).
7. Wang, C.C., et al., *Mol. Biol. Cell*, **18**, 1056-1063 (2007).
8. Ren, Q., et al., *Mol. Biol. Cell*, **18**, 24-33 (2007).

ER,CS,PHC 10/07-1

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications.

Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply.

Please see reverse side of the invoice or packing slip.

SIGMA-ALDRICH™