

VAMP8 Antibody (N-term)

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AM8440a

Product Information

| | |
|--------------------------|------------------------|
| Application | WB, IHC-P, E |
| Primary Accession | Q9BV40 |
| Reactivity | Human |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | IgG1,k |
| Clone Names | 1414CT354.12.23.93 |
| Calculated MW | 11438 |

Additional Information

| | |
|---------------------------|---|
| Gene ID | 8673 |
| Other Names | Vesicle-associated membrane protein 8, VAMP-8, Endobrevin, EDB, VAMP8 |
| Target/Specificity | This VAMP8 antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between 2~24 amino acids from the N-terminal region of human VAMP8. |
| Dilution | WB~~1:1000-1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration. |
| Format | Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS. |
| 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 | VAMP8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

| | |
|-----------------|---|
| Name | VAMP8 {ECO:0000303 PubMed:12130530} |
| Function | SNAREs, soluble N-ethylmaleimide-sensitive factor-attachment protein receptors, are essential proteins for fusion of cellular membranes. SNAREs localized on opposing membranes assemble to form a trans-SNARE complex, an extended, parallel four alpha-helical bundle that drives membrane fusion. VAMP8 is a SNARE involved in autophagy through the direct control of |

autophagosome membrane fusion with the lysosome membrane via its interaction with the STX17-SNAP29 binary t- SNARE complex (PubMed:[23217709](#), PubMed:[25686604](#)). Also required for dense-granule secretion in platelets (PubMed:[12130530](#)). Also plays a role in regulated enzyme secretion in pancreatic acinar cells (By similarity). Involved in the abscission of the midbody during cell division, which leads to completely separate daughter cells (By similarity). Involved in the homotypic fusion of early and late endosomes (By similarity). Also participates in the activation of type I interferon antiviral response through a TRIM6-dependent mechanism (PubMed:[31694946](#)).

Cellular Location

Lysosome membrane; Single-pass type IV membrane protein. Early endosome membrane; Single-pass type IV membrane protein. Late endosome membrane; Single-pass type IV membrane protein. Cell membrane {ECO:0000250|UniProtKB:O70404}; Single-pass type IV membrane protein. Zymogen granule membrane {ECO:0000250|UniProtKB:O70404}; Single-pass type IV membrane protein. Note=Perinuclear vesicular structures of the early and late endosomes, coated pits, and trans-Golgi (By similarity) Sub-tight junctional domain in retinal pigment epithelium cells Midbody region during cytokinesis. Lumenal oriented, apical membranes of nephric tubular cell (By similarity). Cycles through the apical but not through the basolateral plasma membrane (By similarity). Apical region of acinar cells; in zymogen granule membranes (By similarity) {ECO:0000250|UniProtKB:Q9WUF4}

Tissue Location

Platelets..

Background

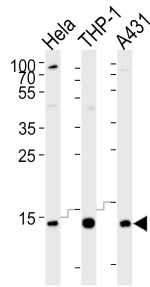
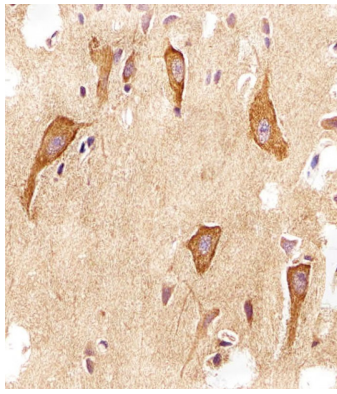
SNAREs, Soluble N-ethylmaleimide-sensitive factor- attachment protein receptors, are essential proteins for fusion of cellular membranes. SNAREs localized on opposing membranes assemble to form a trans-SNARE complex, an extended, parallel four alpha-helical bundle that drives membrane fusion. VAMP8 is a SNARE involved in autophagy through the direct control of autophagosome membrane fusion with the lysosome membrane. Also required for dense-granule secretion in platelets. Plays also a role in regulated enzyme secretion in pancreatic acinar cells. Involved in the abscission of the midbody during cell division, which leads to completely separate daughter cells. Involved in the homotypic fusion of early and late endosomes.

References

Wong S.H.,et al.Mol. Biol. Cell 9:1549-1563(1998).
 Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
 Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
 Hillier L.W.,et al.Nature 434:724-731(2005).
 Polgar J.,et al.Blood 100:1081-1083(2002).

Images

Immunohistochemical analysis of paraffin-embedded H. brain section using VAMP8 Antibody (N-term)(Cat#AM8440a). AM8440a was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Western blot analysis of lysates from HeLa, THP-1, A431 cell line (from left to right), using VAMP8 Antibody (N-term)(Cat. #AM8440a). AM8440a was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20µg per lane.

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