10320 Camino Santa Fe, Suite G
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Anti-VAMP8/Endobrevin Rabbit Monoclonal Antibody

Catalog # ABO13734

Specification

Anti-VAMP8/Endobrevin Rabbit Monoclonal Antibody - Product Information

Application	**WB, IHC, IF, ICC, IP, FC**
Primary Accession	Q9BV40
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-VAMP8/Endobrevin Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-VAMP8/Endobrevin Rabbit Monoclonal Antibody - Additional Information

Gene ID 8673

Other Names
Vesicle-associated membrane protein 8, VAMP-8, Endobrevin, EDB, VAMP8 {ECO:0000303|PubMed:12130530}

Calculated MW
11438 MW KDa

Application Details
WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
IP 1:50
FC 1:50

Subcellular Localization
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 ; Single-pass type IV membrane protein. 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)..

Tissue Specificity
Platelets..

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human VAMP8

Purification
Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-VAMP8/Endobrevin Rabbit Monoclonal Antibody - 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 lysososome 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). Participates also 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..

Anti-VAMP8/Endobrevin Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-VAMP8/Endobrevin Rabbit Monoclonal Antibody - Images

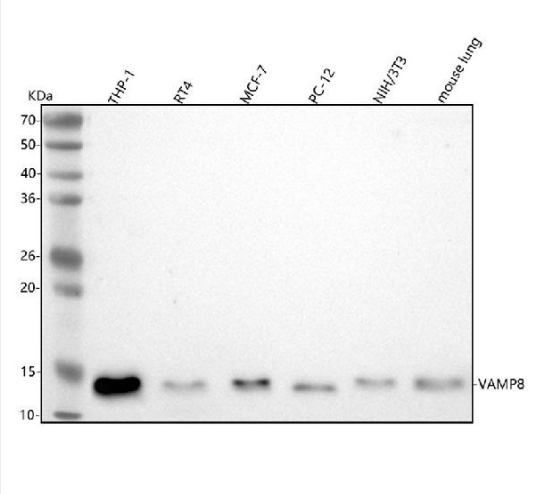

Figure 1. Western blot analysis of VAMP8 using anti-VAMP8 antibody (M02338).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human THP-1 whole cell lysates,
Lane 2: human RT4 whole cell lysates,
Lane 3: human MCF-7 whole cell lysates,
Lane 4: rat PC-12 whole cell lysates,
Lane 5: mouse NIH/3T3 whole cell lysates,
Lane 6: mouse lung tissue lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-VAMP8 antigen affinity purified monoclonal antibody (Catalog # M02338) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for VAMP8 at approximately 11 kDa. The expected band size for VAMP8 is at 11 kDa.

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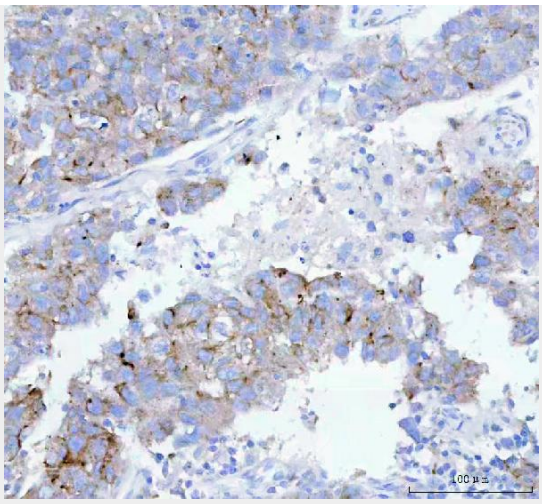

Figure 2. IHC analysis of VAMP8 using anti-VAMP8 antibody (M02338).
VAMP8 was detected in a paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:100 rabbit anti-VAMP8 Antibody (M02338) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

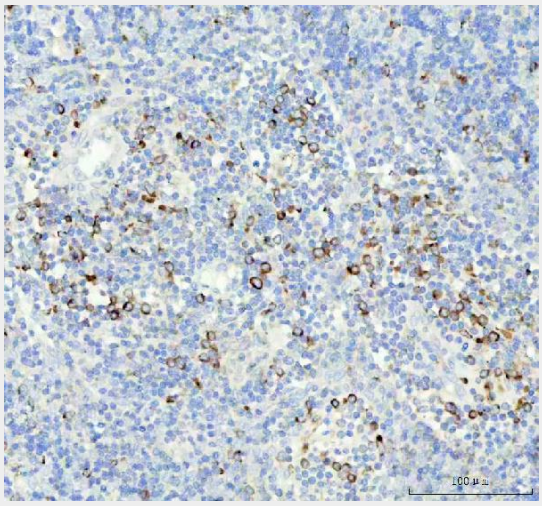

Figure 3. IHC analysis of VAMP8 using anti-VAMP8 antibody (M02338).
VAMP8 was detected in a paraffin-embedded section of human spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:100 rabbit anti-VAMP8 Antibody (M02338) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

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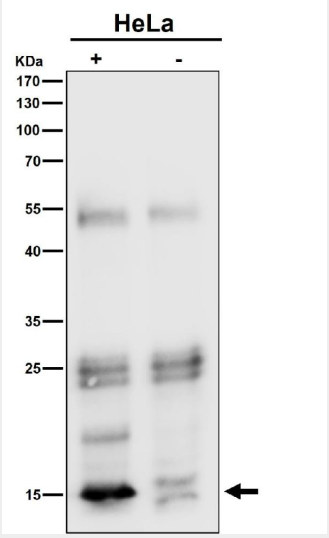

Immunoprecipitate (IP) analysis using the Antibody at 1:50 dilution. (wb at 1:3K dilution).