10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

VAMP8 Antibody

Rabbit mAb
Catalog # AP91058

Product Information

Application	WB, IHC, IF, FC, ICC, IP, IHF
Primary Accession	Q9BV40
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	VAMP8; EDB; Endobrevin; VAMP-8;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	11438

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human VAMP8
Description	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). Vesicle associated membrane protein 8 (VAMP8), also known as endobrevin, is a v-SNARE originally found preferentially localized to early endosomes.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	VAMP8 {ECO:0000303|PubMed:12130530, ECO:0000312|HGNC:HGNC:12647}
Function	SNAREs (soluble N-ethylmaleimide-sensitive factor-attachment protein receptors) are essential proteins for intracellular membrane fusion. SNAREs localized on opposing membranes assemble to form a trans-SNARE complex, an extended, parallel four-helix bundle whose assembly releases energy that drives membrane fusion. The core SNARE complex typically consists of four alpha-helical domains, three from target membrane SNAREs (t-SNAREs) and one from a vesicle SNARE (v- SNARE) (PubMed:23217709, PubMed:25686604, PubMed:28265073). VAMP8 is a v-SNARE that forms a SNARE complex with the t-SNARE STX11 and SNAP23. This SNARE complex plays a critical role in the regulated exocytosis of cytotoxic granules by natural killer (NK) cells and cytotoxic T- lymphocytes (PubMed:28265073). VAMP8 plays a role in autophagy where it controls organelle-organelle membrane fusion through a

VAMP8, SNAP29 and STX17 SNARE complex that mediates the fusion of autophagosome and lysososome membranes (PubMed:23217709, PubMed:25686604). VAMP8 is 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).

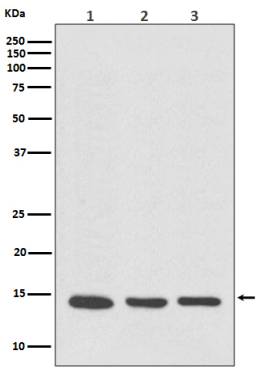
Cellular Location

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..

Images



Western blot analysis of VAMP8 expression in (1) HeLa cell lysate; (2) NIH/3T3 cell lysate; (3) PC-12 cell lysate.

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