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VAMP7 Antibody

Catalog # ASC11508

Product Information

Application	WB, IF, E
Primary Accession	P51809
Other Accession	NP_001172112, 297747292
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	24935
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	VAMP7 antibody can be used for detection of VAMP7 by Western blot at 1 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	6845
Other Names	Vesicle-associated membrane protein 7, VAMP-7, Synaptobrevin-like protein 1, Tetanus-insensitive VAMP, Ti-VAMP, VAMP7, SYBL1
Target/Specificity	VAMP7; At least three isoforms of VAMP7 are known to exist; this antibody will detect the two longest isoforms. This antibody is predicted to not cross-react with other Ras-related proteins.
Reconstitution & Storage	VAMP7 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	VAMP7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	VAMP7
Synonyms	SYBL1
Function	Involved in the targeting and/or fusion of transport vesicles to their target membrane during transport of proteins from the early endosome to the lysosome. Required for heterotypic fusion of late endosomes with lysosomes and homotypic lysosomal fusion. Required for calcium regulated lysosomal exocytosis. Involved in the export of chylomicrons from the endoplasmic reticulum to the cis Golgi. Required for exocytosis of mediators during

	eosinophil and neutrophil degranulation, and target cell killing by natural killer cells. Required for focal exocytosis of late endocytic vesicles during phagosome formation.
Cellular Location	Cytoplasmic vesicle, secretory vesicle membrane; Single-pass type IV membrane protein Golgi apparatus, trans-Golgi network membrane; Single-pass type IV membrane protein. Late endosome membrane; Single-pass type IV membrane protein Lysosome membrane; Single-pass type IV membrane protein. Endoplasmic reticulum membrane; Single-pass type IV membrane protein. Cytoplasmic vesicle, phagosome membrane; Single-pass type IV membrane protein. Synapse, synaptosome. Note=In immature neurons expression is localized in vesicular structures in axons and dendrites while in mature neurons it is localized to the somatodendritic region Colocalizes with LAMP1 in kidney cells. Localization to the endoplasmic reticulum membrane was observed in the intestine but not in liver or kidney (By similarity).
Tissue Location	Detected in all tissues tested.

Background

VAMP7 Antibody: VAMP7 is a member of the soluble N-ethylmaleimide-sensitive factor attachment protein receptor (SNARE) family, localizing to late endosomes and lysosomes. VAMP7 is thought to mediate the fusion of endosomes to their target lysosomes as well as other exocytosis events during phagocytosis and neuritogenesis. VAMP7 interacts with the VPS9 ankyrin repeat protein VARP, a protein that localizes to early endosomes and thought to regulate endosome dynamics. Together with CD82, VAMP7 can modulate the signaling of EGFR by regulating its endocytosis from the plasma membrane.

References

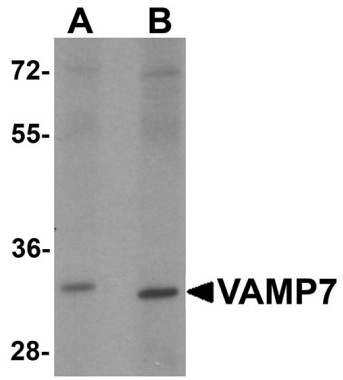
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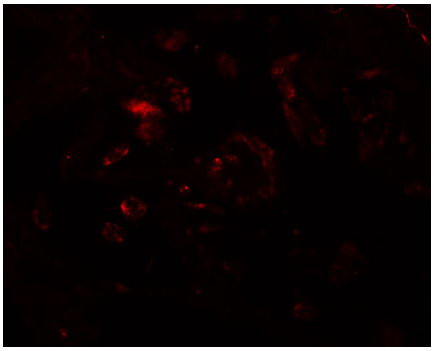
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Images



Western blot analysis of VAMP7 in mouse lung tissue lysate with VAMP7 antibody at 1 µg/mL.

Immunofluorescence of VAMP7 in human lung tissue with VAMP7 antibody at 20 µg/mL.



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