

VAMP7 Antibody
Catalog # ASC11508**Specification**

VAMP7 Antibody - Product Information

Application	IF
Primary Accession	P51809
Other Accession	NP_001172112 , 6845
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	VAMP7 antibody can be used for detection of VAMP7 by Western blot at 0.5 - 1 µg/mL. For immunofluorescence start at 20 µg/mL.

VAMP7 Antibody - Additional InformationGene ID **6845****Target/Specificity**

VAMP7 antibody was raised against an 18 amino acid synthetic peptide near the amino terminus of human VAMP7.

The immunogen is located within amino acids 20 - 70 of VAMP7.

Reconstitution & Storage

VAMP7 antibody can be stored at 4°C for three months and -20°C, 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.

VAMP7 Antibody - 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

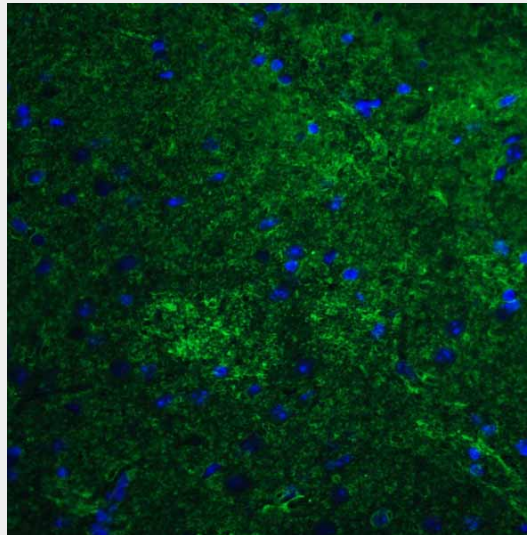
Detected in all tissues tested.

VAMP7 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 Cytometry](#)
- [Cell Culture](#)

VAMP7 Antibody - Images



Immunofluorescence of MFN2 in mouse brain tissue with MFN2 antibody at 5 µg/ml.

VAMP7 Antibody - 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.

VAMP7 Antibody - References

Galli T, Zahraoui A, Vaidyanathan VV, et al. A novel tetanus neurotoxin-insensitive vesicle-associated membrane protein in SNARE complexes of the apical plasma membrane of epithelial cells. *Mol. Biol. Cell* 1998; 9:1437-48.

Wang Y and Tang BL. SNAREs in neurons - beyond synaptic vesicle exocytosis. *Mol. Membr. Biol.* 2006; 23:377-84.

Advani RJ, Yang B, Prekeris R, et al. VAMP-7 mediates vesicular transport from endosomes to lysosomes. *J. Cell Biol.* 1999; 146:765-75.

Burgo A, Sotirakis E, Simmler MC, et al. Role of Varp, a Rab21 exchange factor and TI-VAMP/VAMP7 partner in neurite growth. *EMBO Rep.* 2009; 10:1117-24.