

**VTI1b Antibody**  
**Catalog # ASC11950****Specification**

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**VTI1b Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q9UEU0</a>
Other Accession	<a href="#">NP_006361</a> , <a href="#">5454166</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 14, 19, 26 kDa; Observed: 27 kDa
Application Notes	VTI1b antibody can be used for detection of VTI1b by Western blot at 1 - 2 µg/ml. Antibody can also be used for immunohistochemistry starting at 5 µg/mL.

**VTI1b Antibody - Additional Information**Gene ID **10490****Target/Specificity**

VTI1b; VTI1b antibody is human, mouse and rat reactive. At least three isoforms of VTI1a are known to exist; this antibody will detect all three isoforms. VTI1b antibody is predicted to not cross-react with VTI1a.

**Reconstitution & Storage**

VTI1b antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

**Precautions**

VTI1b Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**VTI1b Antibody - Protein Information****Name** VTI1B**Synonyms** VTI1, VTI1L, VTI1L1, VTI2**Function**

V-SNARE that mediates vesicle transport pathways through interactions with t-SNAREs on the target membrane. These interactions are proposed to mediate aspects of the specificity of vesicle trafficking and to promote fusion of the lipid bilayers. May be concerned with increased secretion of cytokines associated with cellular senescence.

**Cellular Location**

Early endosome membrane; Single-pass type IV membrane protein. Late endosome membrane; Single-pass type IV membrane protein. Lysosome membrane. Cytoplasmic granule. Recycling

endosome membrane; Single-pass type IV membrane protein

#### Tissue Location

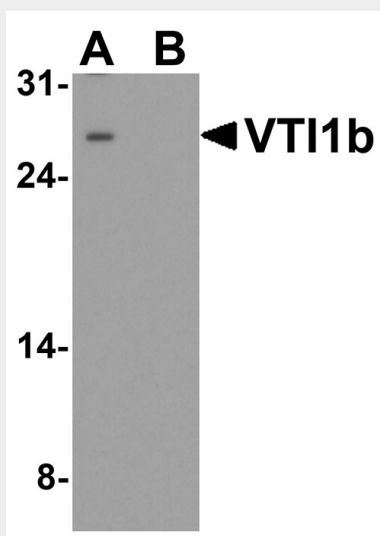
Expressed in all tissues examined.

#### VTI1b Antibody - Protocols

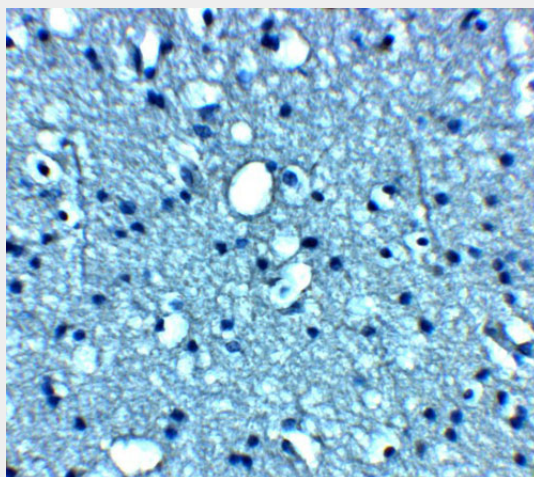
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### VTI1b Antibody - Images



Western blot analysis of VTI1b in HeLa cell lysate with VTI1b antibody at 1  $\mu$ g/ml in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of VTI1b in human brain tissue with VTI1b antibody at 5 µg/mL.

### **VTI1b Antibody - Background**

Vesicle transport through interaction with t-SNAREs homolog 1 (VTI1a and VTI1b) are involved in vesicular transport from the late endosomes to the trans-Golgi network (1). They are both localized in the trans-Golgi network, with VTI1a also found in the Golgi apparatus and VTI1b in endosomes (2,3). It is thought that VTI1b along with the SNARE protein VAMP8 mediates the fusion of antimicrobial and canonical autophagosomes with lysosomes, an essential process for autophagy (4).

### **VTI1b Antibody - References**

Fischer VM and Stevens TH. A human homolog can functionally replace the yeast vesicle-associated SNARE Vti1p in two vesicle transport pathways. *J. Biol. Chem.* 1998; 273:2624-30.

Kreykenbohm V, Wenzel D, Antonin W et al. The SNAREs vti1a and vti1b have distinct localization and SNARE complex partners. *Eur. J. Cell Biol.* 2002; 81:273-80.

Antonin W, Riedel D, von Mollard GF, et al. The SNARE Vti1a-beta is localized to small synaptic vesicles and participates in a novel SNARE complex. *J. Neurosci.* 2000; 20:5724-32.

Furuta N, Fujita N, Noda T, et al. Combinational soluble N-ethylmaleimide-sensitive factor attachment protein receptor proteins VAMP8 and Vti1b mediate fusion of antimicrobial and canonical autophagosomes with lysosomes. *Mol. Biol. Cell.* 2010; 21:1001-10.