

**ZFYVE27 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP17130a****Specification**

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**ZFYVE27 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [Q5T4F4](#)**ZFYVE27 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 118813**Other Names**

Protrudin, Zinc finger FYVE domain-containing protein 27, ZFYVE27

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ZFYVE27 Antibody (N-term) Blocking Peptide - Protein Information****Name** ZFYVE27**Synonyms** SPG33 {ECO:0000303|PubMed:24668814}**Function**

Key regulator of RAB11-dependent vesicular trafficking during neurite extension through polarized membrane transport (PubMed:<a href="http://www.uniprot.org/citations/17082457" target="\_blank">17082457</a>). Promotes axonal elongation and contributes to the establishment of neuronal cell polarity (By similarity). Involved in nerve growth factor-induced neurite formation in VAPA-dependent manner (PubMed:<a href="http://www.uniprot.org/citations/19289470" target="\_blank">19289470</a>). Contributes to both the formation and stabilization of the tubular ER network (PubMed:<a href="http://www.uniprot.org/citations/24668814" target="\_blank">24668814</a>). Involved in ER morphogenesis by regulating the sheet-to-tubule balance and possibly the density of tubule interconnections (PubMed:<a href="http://www.uniprot.org/citations/23969831" target="\_blank">23969831</a>). Acts as an adapter protein and facilitates the interaction of KIF5A with VAPA, VAPB, SURF4, RAB11A, RAB11B and RTN3 and the ZFYVE27-KIF5A complex contributes to the transport of these proteins in neurons. Can induce formation of neurite-like membrane protrusions in non-neuronal cells in a KIF5A/B-dependent manner (PubMed:<a href="http://www.uniprot.org/citations/21976701" target="\_blank">21976701</a>).

**Cellular Location**

Recycling endosome membrane {ECO:0000250|UniProtKB:Q6P7B7}; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Cell projection, growth cone membrane {ECO:0000250|UniProtKB:Q3TXX3}; Multi-pass membrane protein.

Note=Localizes at both dendrites and axons (By similarity). Localizes to endoplasmic reticulum tubular network {ECO:0000250|UniProtKB:Q3TXX3, ECO:0000269|PubMed:23969831, ECO:0000269|PubMed:24668814}

**ZFYVE27 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**ZFYVE27 Antibody (N-term) Blocking Peptide - Images****ZFYVE27 Antibody (N-term) Blocking Peptide - Background**

This gene encodes a protein with several transmembrane domains, a Rab11-binding domain and a lipid-binding FYVE finger domain. The encoded protein appears to promote neurite formation. A mutation in this gene has been reported to be associated with hereditary spastic paraplegia, however the pathogenicity of the mutation, which may simply represent a polymorphism, is unclear.

**ZFYVE27 Antibody (N-term) Blocking Peptide - References**

Saita, S., et al. J. Biol. Chem. 284(20):13766-13777(2009) Martignoni, M., et al. Am. J. Hum. Genet. 83(1):127-128(2008) Shirane, M., et al. Science 314(5800):818-821(2006) Mannan, A.U., et al. Am. J. Hum. Genet. 79(2):351-357(2006) Wang, A.G., et al. Biochem. Biophys. Res. Commun. 345(3):1022-1032(2006)