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ZFYVE27 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP17130a

Specification

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:17082457). 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:19289470). Contributes to both the formation and stabilization of the tubular ER network (PubMed:24668814). Involved in ER morphogenesis by regulating the sheet-to-tubule balance and possibly the density of tubule interconnections (PubMed:23969831). 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:21976701).

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 transmembranedomains, a Rab11-binding domain and a lipid-binding FYVE fingerdomain. The encoded protein appears to promote neurite formation. Amutation in this gene has been reported to be associated withhereditary spastic paraplegia, however the pathogenicity of themutation, 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)