

## **ZFYVE27 Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17130A

### **Specification**

# **ZFYVE27 Antibody (N-term) - Product Information**

Application WB,E
Primary Accession O5T4F4

Other Accession <u>Q6P7B7</u>, <u>Q3TXX3</u>, <u>NP 001002261.1</u>,

NP 001002262.1

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
28-56

# ZFYVE27 Antibody (N-term) - Additional Information

### **Gene ID** 118813

### **Other Names**

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

# Target/Specificity

This ZFYVE27 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 28-56 amino acids from the N-terminal region of human ZFYVE27.

#### **Dilution**

WB~~1:1000

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

ZFYVE27 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# **ZFYVE27 Antibody (N-term) - 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**

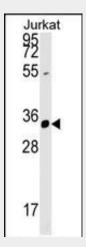
Recycling endosome membrane {ECO:0000250|UniProtKB:Q6P7B7}; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Cell projection, growth cone membrane {ECO:0000250|UniProtKB:Q3TXX3}; Multi-pass membrane protein. Note=Localizes at both dendrites and axons (By similarity). Localizes to endoplasmic reticulum tubular network {ECO:0000250|UniProtKB:Q3TXX3, ECO:0000269|PubMed:23969831, ECO:0000269|PubMed:24668814}

# **ZFYVE27 Antibody (N-term) - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### **ZFYVE27 Antibody (N-term) - Images**



ZFYVE27 Antibody (N-term) (Cat. #AP17130a) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the ZFYVE27 antibody detected the ZFYVE27 protein (arrow).

## ZFYVE27 Antibody (N-term) - 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) - 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)