

## **ANKRD27 Antibody (Internal)**

Rabbit Polyclonal Antibody Catalog # ALS13587

### **Specification**

# **ANKRD27 Antibody (Internal) - Product Information**

Application IHC
Primary Accession O96NW4
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 117kDa KDa

# ANKRD27 Antibody (Internal) - Additional Information

### **Gene ID 84079**

#### **Other Names**

Ankyrin repeat domain-containing protein 27, VPS9 domain-containing protein, ANKRD27

## **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

#### **Precautions**

ANKRD27 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

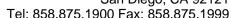
# **ANKRD27 Antibody (Internal) - Protein Information**

### Name ANKRD27

#### **Function**

May be a guanine exchange factor (GEF) for Rab21, Rab32 and Rab38 and regulate endosome dynamics (PubMed:<a href="http://www.uniprot.org/citations/16525121" target=" blank">16525121</a>, PubMed:<a href="http://www.uniprot.org/citations/18477474" target=" blank">18477474</a>). May regulate the participation of VAMP7 in membrane fusion events; in vitro inhibits VAMP7-mediated SNARE complex formation by trapping VAMP7 in a closed, fusogenically inactive conformation (PubMed:<a href="http://www.uniprot.org/citations/23104059" target=" blank">23104059</a>). Involved in peripheral melanosomal distribution of TYRP1 in melanocytes; the function, which probably is implicating vesicle-trafficking, includes cooperation with Rab32, Rab38 and VAMP7 (By similarity). Involved in the regulation of neurite growth; the function seems to require its GEF activity, probably towards Rab21, and VAMP7 but not Rab32/38 (By similarity). Proposed to be involved in Golgi sorting of VAMP7 and transport of VAMP7 vesicles to the cell surface; the function seems to implicate kinesin heavy chain isoform 5 proteins, GOLGA4, RAB21 and MACF1 (PubMed: <a href="http://www.uniprot.org/citations/22705394" target=" blank">22705394</a>). Required for the colocalization of VAMP7 and Rab21, probably on TGN sites (PubMed:<a href="http://www.uniprot.org/citations/19745841" target=" blank">19745841</a>). Involved in GLUT1 endosome-to-plasma membrane trafficking;







the function is dependent of association with VPS29 (PubMed: <a href="http://www.uniprot.org/citations/24856514" target=" blank">24856514</a>). Regulates the proper trafficking of melanogenic enzymes TYR, TYRP1 and DCT/TYRP2 to melanosomes in melanocytes (By similarity).

#### **Cellular Location**

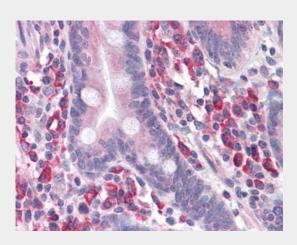
Early endosome. Late endosome. Cytoplasmic vesicle membrane. Lysosome Cell membrane. Melanosome {ECO:0000250|UniProtKB:Q3UMR0}. Note=Colocalizes with VAMP7 in transport vesicles in the shaft of hippocampal neurons (By similarity) {ECO:0000250|UniProtKB:Q3UMR0}

# **ANKRD27 Antibody (Internal) - Protocols**

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

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

# ANKRD27 Antibody (Internal) - Images



Anti-ANKRD27 antibody IHC of human small intestine.

# ANKRD27 Antibody (Internal) - Background

May be a quanine exchange factor (GEF) for Rab21, Rab32 and Rab38 and regulate endosome dynamics (PubMed:16525121, PubMed:18477474). May regulate the participation of VAMP7 in membrane fusion events; in vitro inhibits VAMP7-mediated SNARE complex formation by trapping VAMP7 in a closed, fusogenically inactive conformation (PubMed:23104059). Involved in peripheral melanosomal distribution of TYRP1 in melanocytes; the function, which probably is implicating vesicle-trafficking, includes cooperation with Rab32, Rab38 and VAMP7 (By similarity). Involved in the regulation of neurite growth; the function seems to require its GEF activity, probably towards Rab21, and VAMP7 but not Rab32/38 (By similarity). Proposed to be involved in Golgi sorting of VAMP7 and transport of VAMP7 vesicles to the cell surface; the function seems to implicate kinesin heavy chain isoform 5 proteins, GOLGA4, RAB21 and MACF1 (PubMed:22705394). Required for the colocalization of VAMP7 and Rab21, probably on TGN sites (PubMed:19745841). Involved in GLUT1 endosome-to-plasma membrane trafficking; the function is dependent of association with VPS29



(PubMed:24856514).

# **ANKRD27 Antibody (Internal) - References**

Wiemann S.,et al.Genome Res. 11:422-435(2001). Ota T.,et al.Nat. Genet. 36:40-45(2004). Wan D.,et al.Proc. Natl. Acad. Sci. U.S.A. 101:15724-15729(2004). Bechtel S.,et al.BMC Genomics 8:399-399(2007). Zhang X.,et al.J. Cell Sci. 119:1053-1062(2006).