

# **SNX3 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5100

## **Specification**

# **SNX3 Antibody (Center) - Product Information**

Application WB,E
Primary Accession 060493

Other Accession Q5U211, Q1RMH8, NP\_690040.1

Reactivity
Predicted
Host
Clonality
Human, Mouse
Bovine, Rat
Rabbit
Polyclonal

Calculated MW H=19,15,16;M=19;Rat=19 KDa

Isotype Rabbit IgG
Antigen Source HUMAN

# SNX3 Antibody (Center) - Additional Information

**Gene ID 8724** 

**Antigen Region** 

78-105

**Other Names** 

SNX3; Sorting nexin-3; Protein SDP3

**Dilution** 

WB~~1:500

## **Target/Specificity**

This SNX3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 78-105 amino acids from the Central region of human SNX3.

### **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**

SNX3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### **SNX3 Antibody (Center) - Protein Information**



Name SNX3 {ECO:0000303|PubMed:30213940, ECO:0000312|HGNC:HGNC:11174}

### **Function**

Phosphoinositide-binding protein required for multivesicular body formation. Specifically binds phosphatidylinositol 3-phosphate (PtdIns(P3)). Can also bind phosphatidylinositol 4-phosphate (PtdIns(P4)), phosphatidylinositol 5-phosphate (PtdIns(P5)) and phosphatidylinositol 3,5-biphosphate (PtdIns(3,5)P2) (By similarity). Plays a role in protein transport between cellular compartments. Together with RAB7A facilitates endosome membrane association of the retromer cargo-selective subcomplex (CSC/VPS). May in part act as component of the SNX3-retromer complex which mediates the retrograde endosome-to-TGN transport of WLS distinct from the SNX-BAR retromer pathway (PubMed:<a href="http://www.uniprot.org/citations/21725319" target="\_blank">21725319</a></a>, PubMed:<a href="http://www.uniprot.org/citations/24344282" target="\_blank">24344282</a>, PubMed:<a href="http://www.uniprot.org/citations/30213940" target="\_blank">30213940</a>, Promotes stability and cell surface expression of epithelial sodium channel (ENAC) subunits SCNN1A and SCNN1G (By similarity). Not involved in EGFR degradation. Involved in the regulation of phagocytosis in dendritic cells possibly by regulating EEA1 recruitment to the nascent phagosomes (PubMed:<a

href="http://www.uniprot.org/citations/23237080" target="\_blank">23237080</a>). Involved in iron homeostasis through regulation of endocytic recycling of the transferrin receptor TFRC presumably by delivering the transferrin:transferrin receptor complex to recycling endosomes; the function may involve the CSC retromer subcomplex (By similarity). In the case of Salmonella enterica infection plays arole in maturation of the Salmonella-containing vacuole (SCV) and promotes recruitment of LAMP1 to SCVs (PubMed:<a

href="http://www.uniprot.org/citations/20482551" target=" blank">20482551</a>).

### **Cellular Location**

Early endosome. Cytoplasmic vesicle, phagosome. Note=Colocalizes to clathrin-coated endosomal vesicles morphologically distinct from retromer-decorated non-branched endosomal tubule structures (PubMed:21725319) Colocalizes with EEA1 on nascent phagosomes in dendritic cells but competes with EEA1 for binding to phagosomal membrane (PubMed:23237080). In the case of Salmonella enterica infection localizes to Salmonella-containing vacuoles (SCVs) from which SNX3-containing tubules form 30-60 min after infection (PubMed:20482551).

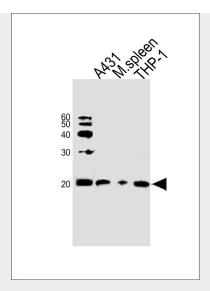
# **SNX3 Antibody (Center) - Protocols**

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

# SNX3 Antibody (Center) - Images





Western blot analysis of lysates from A431 cell line, mouse spleen tissue, THP-1 cell line (from left to right), using SNX3 Antibody (Center)(Cat. #AW5100). AW5100 was diluted at 1:500 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.

# SNX3 Antibody (Center) - Background

This gene encodes a member of the sorting nexin family. Members of this family contain a phox (PX) domain, which is a phosphoinositide binding domain, and are involved in intracellular trafficking. This protein does not contain a coiled coil region, like most family members. This protein interacts with phosphatidylinositol-3-phosphate, and is involved in protein trafficking.

# **SNX3 Antibody (Center) - References**

Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010):
Pons, V., et al. PLoS Biol. 6 (9), E214 (2008):
Vieira, A.R., et al. Genet. Med. 10(9):668-674(2008)
Dong, H., et al. Acta Biochim. Biophys. Sin. (Shanghai) 39(7):540-546(2007)
Kumar, R.A., et al. BMC Med. Genet. 8, 48 (2007):