

SNX3 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5100

Specification

SNX3 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O60493
Other Accession	Q5U211 , Q1RMH8 , NP_690040.1
Reactivity	Human, Mouse
Predicted	Bovine, Rat
Host	Rabbit
Clonality	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:21725319, PubMed:24344282, PubMed:30213940). 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:23237080). 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). Involved in regulation of neurite outgrowth in primary neurons (By similarity). Required for trafficking of WLS to the early endosome for recycling which promotes both canonical and non-canonical WNT signaling and is essential for neural tube closure (By similarity).

Cellular Location

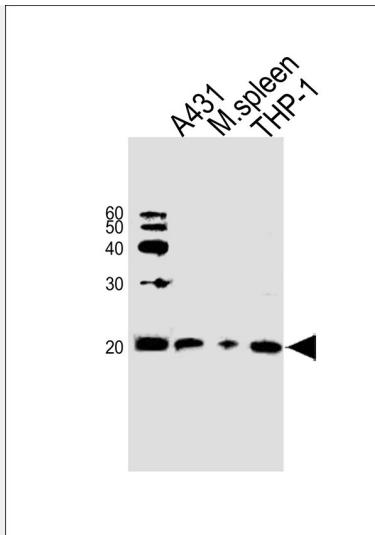
Early endosome. Cytoplasmic vesicle, phagosome. Note=Colocalizes to clathrin-coated endosomal vesicles morphologically distinct from retromer-decorated non-branched endosomal tubule structures (PubMed:21725319) Colocalizes with EEA1 on nascent phagosomes in dendritic cells but competes with EEA1 for 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 minutes 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](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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) :