

### SNX1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5577

#### Specification

## SNX1 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW Isotype Antigen Source WB,E <u>O13596</u> <u>O4R503</u>, <u>O5RFP8</u> Human Rabbit Polyclonal H=59,52,63;M=59;R=59 KDa Rabbit IgG HUMAN

## SNX1 Antibody (C-term) - Additional Information

Gene ID 6642

Antigen Region 426-455

Other Names Sorting nexin-1, SNX1

Dilution WB~~1:1000

**Target/Specificity** 

This SNX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 426-455 amino acids from the C-terminal region of human SNX1.

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

SNX1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## SNX1 Antibody (C-term) - Protein Information

Name SNX1

**Function** 

Involved in several stages of intracellular trafficking. Interacts with membranes containing phosphatidylinositol 3-phosphate (PtdIns(3P)) or phosphatidylinositol 3,5-bisphosphate



(PtdIns(3,5)P2) (PubMed:<a href="http://www.uniprot.org/citations/12198132"

target=" blank">12198132</a>). Acts in part as component of the retromer membranedeforming SNX-BAR subcomplex. The SNX-BAR retromer mediates retrograde transport of cargo proteins from endosomes to the trans-Golgi network (TGN) and is involved in endosome-to-plasma membrane transport for cargo protein recycling. The SNX-BAR subcomplex functions to deform the donor membrane into a tubular profile called endosome-to-TGN transport carrier (ETC) (Probable). Can sense membrane curvature and has in vitro vesicle-to-membrane remodeling activity (PubMed:<a href="http://www.uniprot.org/citations/19816406" target=" blank">19816406</a>, PubMed:<a href="http://www.uniprot.org/citations/23085988" target=" blank">23085988</a>). Involved in retrograde endosome-to-TGN transport of lysosomal enzyme receptors (IGF2R, M6PR and SORT1) and Shiginella dysenteria toxin stxB. Plays a role in targeting ligand-activated EGFR to the lysosomes for degradation after endocytosis from the cell surface and release from the Golgi (PubMed:<a href="http://www.uniprot.org/citations/12198132" target=" blank">12198132</a>. PubMed:<a href="http://www.uniprot.org/citations/15498486" target=" blank">15498486</a>. PubMed:<a href="http://www.uniprot.org/citations/17101778" target="\_blank">17101778</a>, PubMed:<a href="http://www.uniprot.org/citations/17550970" target="\_blank">17550970</a>, PubMed: <a href="http://www.uniprot.org/citations/18088323" target=" blank">18088323</a>, PubMed:<a href="http://www.uniprot.org/citations/21040701" target="blank">21040701</a>). Involvement in retromer-independent endocytic trafficking of P2RY1 and lysosomal degradation of protease-activated receptor-1/F2R (PubMed:<a href="http://www.uniprot.org/citations/16407403" target=" blank">16407403</a>, PubMed:<a href="http://www.uniprot.org/citations/20070609" target=" blank">20070609</a>). Promotes KALRN- and RHOG-dependent but retromer-independent membrane remodeling such as lamellipodium formation; the function is dependent on GEF activity of KALRN (PubMed: <a

href="http://www.uniprot.org/citations/20604901" target="\_blank">20604901</a>). Required for endocytosis of DRD5 upon agonist stimulation but not for basal receptor trafficking (PubMed:<a href="http://www.uniprot.org/citations/23152498" target="\_blank">23152498</a>).

#### **Cellular Location**

Endosome membrane; Peripheral membrane protein; Cytoplasmic side. Golgi apparatus, trans-Golgi network membrane; Peripheral membrane protein; Cytoplasmic side. Early endosome membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, lamellipodium. Note=Enriched on tubular elements of the early endosome membrane. Binds preferentially to highly curved membranes enriched in phosphatidylinositol 3-phosphate (PtdIns(3P)) or phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2) (PubMed:15498486). Colocalized with SORT1 to tubular endosomal membrane structures called endosome-to-TGN transport carriers (ETCs) which are budding from early endosome vacuoles just before maturing into late endosome vacuoles (PubMed:18088323). Colocalizes with DNAJC13 and Shiginella dysenteria toxin stxB on early endosomes (PubMed:19874558) Colocalized with F-actin at the leading edge of lamellipodia in a KALRN-dependent manner (PubMed:20604901).

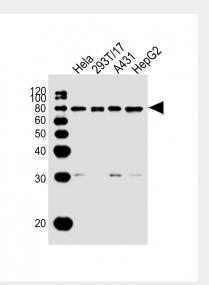
## SNX1 Antibody (C-term) - Protocols

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

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

### SNX1 Antibody (C-term) - Images





All lanes : Anti-SNX1 Antibody (C-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: 293T/17 whole cell lysate Lane 3: A431 whole cell lysate Lane 4: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 59 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# SNX1 Antibody (C-term) - 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 endosomal protein regulates the cell-surface expression of epidermal growth factor receptor. This protein also has a role in sorting protease-activated receptor-1 from early endosomes to lysosomes. This protein may form oligomeric complexes with family members. This gene results in three transcript variants encoding distinct isoforms.

## SNX1 Antibody (C-term) - References

Nisar, S., et al. Traffic 11(4):508-519(2010) Mari, M., et al. Traffic 9(3):380-393(2008) Bryant, D.M., et al. J. Cell. Sci. 120 (PT 10), 1818-1828 (2007) : Rojas, R., et al. Mol. Cell. Biol. 27(3):1112-1124(2007) Nguyen, L.N., et al. Clin. Cancer Res. 12(23):6952-6959(2006)