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# SNX1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5577

## Product Information

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| **Application** | WB |
| **Primary Accession** | Q13596 |
| **Other Accession** | Q4R503, Q5RFP8 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 59070 |
| **Isotype** | Rabbit IgG |
| **Antigen Source** | HUMAN |

## Additional Information

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

## Protein Information

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| **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:12198132). |

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| | Acts in part as component of the retromer membrane- deforming 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:19816406, PubMed:23085988). 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:12198132, PubMed:15498486, PubMed:17101778, PubMed:17550970, PubMed:18088323, PubMed:21040701). Involvement in retromer-independent endocytic trafficking of P2RY1 and lysosomal degradation of protease-activated receptor-1/F2R (PubMed:16407403, PubMed:20070609). Promotes KALRN- and RHOG-dependent but retromer-independent membrane remodeling such as lamellipodium formation; the function is dependent on GEF activity of KALRN (PubMed:20604901). Required for endocytosis of DRD5 upon agonist stimulation but not for basal receptor trafficking (PubMed:23152498). |
| **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). |

## 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.

## References


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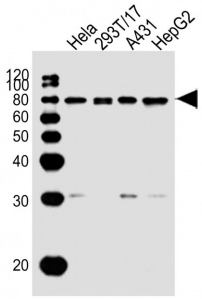
Mari, M., et al. Traffic 9(3):380-393(2008)
Bryant, D.M., et al. J. Cell. Sci. 120 (PT 10), 1818-1828 (2007) :
Rojas, R., et al. Mol. Cell. Biol. 27(3):1112-1124(2007)
Nguyen, L.N., et al. Clin. Cancer Res. 12(23):6952-6959(2006)


## 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.