

SNX1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14044b

Product Information

Application	WB, E
Primary Accession	Q13596
Other Accession	Q4R503 , NP_683758.1 , NP_690039.1 , NP_003090.2
Reactivity	Human, Rat, Mouse
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34089
Calculated MW	59070
Antigen Region	426-455

Additional Information

Gene ID	6642
Other Names	Sorting nexin-1, SNX1
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.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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

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).

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 Shigella dysenteriae 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 Shigella dysenteriae toxin stxB on early endosomes (PubMed:[19874558](#)) Colocalized with F-actin at the leading edge of lamellipodia in a KALRN-dependent manner (PubMed:[20604901](#)).

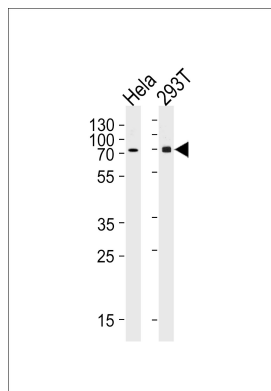
Background

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

- 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)

Images



Western blot analysis of lysates from HeLa, 293T cell line (from left to right), using SNX1 Antibody (C-term)(Cat. #AP14044b). AP14044b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.