

# SNX1 Polyclonal Antibody

Catalog # AP72541

## Product Information

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Application	WB
Primary Accession	<a href="#">Q13596</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	59070

## Additional Information

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Gene ID	6642
Other Names	SNX1; Sorting nexin-1
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## Protein Information

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Name	SNX1
Function	<p>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="#">12198132</a>). 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:<a href="#">19816406</a>, PubMed:<a href="#">23085988</a>). Involved in retrograde endosome-to-TGN transport of lysosomal enzyme receptors (IGF2R, M6PR and SORT1) and Shigella dysentery 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="#">12198132</a>, PubMed:<a href="#">15498486</a>, PubMed:<a href="#">17101778</a>, PubMed:<a href="#">17550970</a>, PubMed:<a href="#">18088323</a>, PubMed:<a href="#">21040701</a>). Involvement in retromer-independent endocytic trafficking of P2RY1 and lysosomal</p>

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](#)).

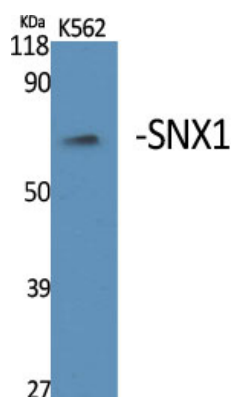
### Cellular Location

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

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 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:[17550970](#), PubMed:[17101778](#), 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](#)).

## Images



Western Blot analysis of various cells using SNX1 Polyclonal Antibody

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