

# SNX1 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI15053

## **Product Information**

WB
<u>Q13596</u>
<u>NM_001242933, NP_001229862</u>
Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Rabbit
Polyclonal
59070

#### **Additional Information**

Gene ID	6642
Alias Symbol Other Names	HsT17379, MGC8664, SNX1A, Vps5, VPS5 Sorting nexin-1, SNX1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-SNX1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	SNX1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

NameSNX1FunctionInvolved in several stages of intracellular trafficking. Interacts with<br/>membranes containing phosphatidylinositol 3-phosphate (PtdIns(3P)) or<br/>phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2) (PubMed:12198132).<br/>Acts in part as component of the retromer membrane- deforming SNX-BAR<br/>subcomplex. The SNX-BAR retromer mediates retrograde transport of cargo<br/>proteins from endosomes to the trans-Golgi network (TGN) and is involved in<br/>endosome-to-plasma membrane transport for cargo protein recycling. The<br/>SNX-BAR subcomplex functions to deform the donor membrane into a<br/>tubular profile called endosome-to-TGN transport carrier (ETC) (Probable).<br/>Can sense membrane curvature and has in vitro vesicle-to-membrane<br/>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).

## References

Kurten R.C.,et al.Science 272:1008-1010(1996). Haft C.R.,et al.Mol. Cell. Biol. 18:7278-7287(1998). Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Ota T.,et al.Nat. Genet. 36:40-45(2004). Zody M.C.,et al.Nature 440:671-675(2006).

### Images



Human , Mouse



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