

SNX6 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1464d

Product Information

Application WB, E **Primary Accession** Q9UNH7 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB23004 **Calculated MW** 46649

Additional Information

Gene ID 58533

Other Names Sorting nexin-6, TRAF4-associated factor 2, Sorting nexin-6, N-terminally

processed, SNX6

Target/SpecificityThis SNX6 antibody is generated from rabbits immunized with human SNX6

recombinant protein.

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 SNX6 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name SNX6

Function Involved in several stages of intracellular trafficking. Interacts with

membranes phosphatidylinositol 3,4-bisphosphate and/or

phosphatidylinositol 4,5-bisphosphate (Probable). Acts in part as component

of the retromer membrane-deforming SNX-BAR subcomplex

(PubMed:<u>19935774</u>). 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). Does not have in vitro vesicle-to-membrane remodeling activity (PubMed:23085988). Involved in retrograde endosome- to-TGN transport of lysosomal enzyme receptor IGF2R (PubMed:17148574). May function as link between transport vesicles and dynactin (Probable). Negatively regulates retrograde transport of BACE1 from the cell surface to the trans-Golgi network (PubMed:20354142). Involved in E-cadherin sorting and degradation; inhibits PIP5K1C isoform 3-mediated E-cadherin degradation (PubMed:24610942). In association with GIT1 involved in EGFR degradation. Promotes lysosomal degradation of CDKN1B (By similarity). May contribute to transcription regulation (Probable).

Cellular Location

Early endosome. Early endosome membrane; Peripheral membrane protein; Cytoplasmic side Cytoplasmic vesicle. Cytoplasm. Nucleus. Note=Interaction with SNX1 or SNX2 promotes location at endosome membranes (PubMed:19935774). Only a minor proportion is seen in the nucleus.

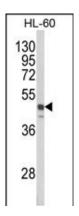
Background

SNX6 interacts with members of the transforming growth factor-beta family of receptor serine-threonine kinases. These receptors belong to two classes: type II receptors that bind ligand, and type I receptors that are subsequently recruited to transduce the signal. Of the type II receptors, SNX6 was found to interact strongly with ActRIIB and more moderately with wild type and kinase-defective mutants of TbetaRII. Of the type I receptors, SNX6 was found to interact only with inactivated TbetaRI. SNXs 1-4 also interacted with the transforming growth factor-beta receptor family, showing different receptor preferences. Conversely, SNX6 behaved similarly to the other SNX proteins in its interactions with receptor tyrosine kinases. Strong heteromeric interactions were also seen among SNX1, -2, -4, and -6, suggesting the formation in vivo of oligomeric complexes. These findings are the first evidence for the association of the SNX family of molecules with receptor serine-threonine kinases.

References

Parks W.T., J. Biol. Chem. 276:19332-19339(2001).

Images



Western blot analysis of SNX6 Antibody (Cat. #AP1464d) in HL-60 cell line lysates (35ug/lane). SNX6 (arrow) was detected using the purified Pab.

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