10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-Sorting Nexin 5 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1740

Specification

KD-Validated Anti-Sorting Nexin 5 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	Q9Y5X3
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 47 kDa , observed , 47 kDa KDa**
Gene Name	**SNX5**
Aliases	**SNX5; Sorting Nexin 5; Sorting Nexin-5**
Immunogen	**A synthesized peptide derived from human SNX5**

KD-Validated Anti-Sorting Nexin 5 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**27131**

Other Names
Sorting nexin-5, SNX5

KD-Validated Anti-Sorting Nexin 5 Rabbit Monoclonal Antibody - Protein Information

Name SNX5

Function
Involved in several stages of intracellular trafficking. Interacts with membranes containing phosphatidylinositol 3-phosphate (PtdIns(3P)) or phosphatidylinositol 3,4-bisphosphate (PtdIns(3,4)P2) (PubMed:15561769). 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). Does not have in vitro vesicle-to-membrane remodeling activity (PubMed:23085988). Involved in retrograde transport of lysosomal enzyme receptor IGF2R (PubMed:17148574, PubMed:18596235). May function as link between endosomal transport vesicles and dynactin (Probable). Plays a role in the internalization of EGFR after EGF stimulation (Probable). Involved in EGFR endosomal sorting and degradation; the function involves PIP5K1C isoform 3 and is retromer- independent (PubMed:23602387). Together with PIP5K1C isoform 3 facilitates HGS interaction with ubiquitinated EGFR, which initiates EGFR sorting to intraluminal vesicles (ILVs) of the multivesicular body for subsequent lysosomal degradation (Probable). Involved in E-cadherin sorting and degradation; inhibits PIP5K1C isoform

3-mediated E-cadherin degradation (PubMed:24610942). Plays a role in macropinocytosis (PubMed:18854019, PubMed:21048941).

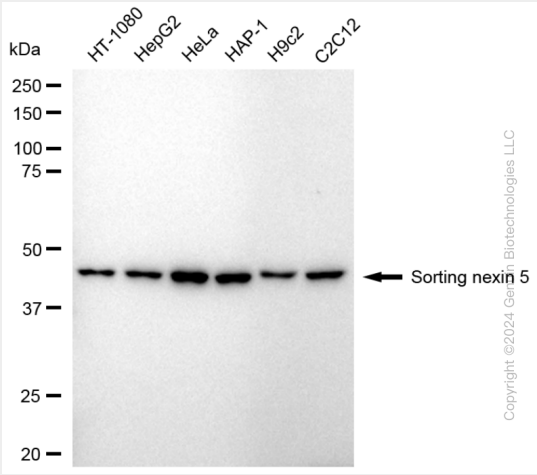
Cellular Location
Endosome. Early endosome Early endosome membrane; Peripheral membrane protein; Cytoplasmic side. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic vesicle membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm. Cell projection, phagocytic cup. Cell projection, ruffle. Note=Recruited to the plasma membrane after EGF stimulation, which leads to increased levels of phosphatidylinositol 3,4-bisphosphate (PdtIns(3,4)P2) (PubMed:15561769). Detected on macropinosomes (PubMed:16968745, PubMed:21048941). Targeted to membrane ruffles in response to EGFR stimulation.

KD-Validated Anti-Sorting Nexin 5 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Sorting Nexin 5 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Sorting nexin 5 antibody (Cat#AGI1740). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Sorting nexin 5 antibody (Cat#AGI1740, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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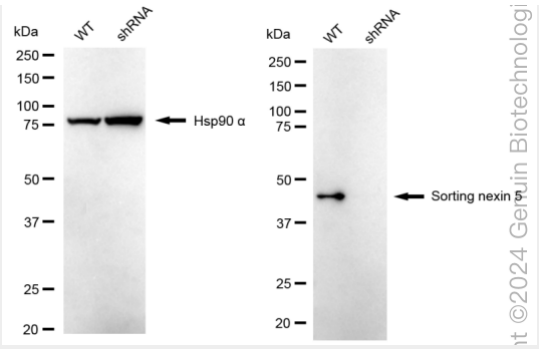
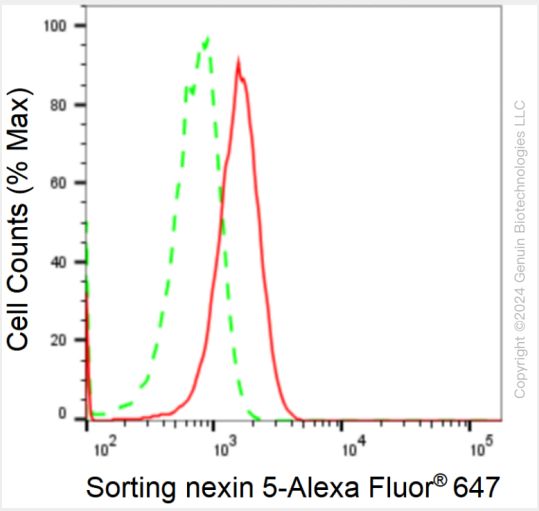


Western blotting analysis using anti-Sorting nexin 5 antibody (Cat#AGI1740). Sorting nexin 5 expression in wild type (WT) and Sorting nexin 5 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Sorting nexin 5 antibody (Cat#AGI1740, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Sorting nexin 5 expression in HAP-1 cells using anti-Sorting nexin 5 antibody (Cat#AGI1740, 1:2,000). Green, isotype control; red, Sorting nexin 5.