

# SNX17 (H-10): sc-166957

## BACKGROUND

Sorting nexin (SNX) proteins are members of a large family of hydrophilic proteins that interact with a variety of receptor types, are involved in intracellular trafficking and contain a characteristic phox homology (PX) domain. SNX17, which demonstrates ubiquitous expression, contains a PX domain that shares 28% sequence identity with the PX domain of SNX1, as well as a B41 (FERM) domain. The SNX17 gene maps to chromosome 2p23.3 and is part of the cellular sorting machinery that regulates cell surface levels of LRP (lipoprotein receptor-related protein) by promoting its recycling. While the PX domain of SNX17 interacts with phosphatidylinositol-3-phosphate for membrane association, the FERM domain and the carboxyl-terminal region aid in LRP binding. Research indicates that SNX17 is localized to the limiting membrane and recycling tubules of early endosomes.

## CHROMOSOMAL LOCATION

Genetic locus: SNX17 (human) mapping to 2p23.3; Snx17 (mouse) mapping to 5 B1.

## SOURCE

SNX17 (H-10) is a mouse monoclonal antibody raised against amino acids 270-470 mapping at the C-terminus of SNX17 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SNX17 (H-10) is available conjugated to agarose (sc-166957 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166957 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166957 PE), fluorescein (sc-166957 FITC), Alexa Fluor<sup>®</sup> 488 (sc-166957 AF488), Alexa Fluor<sup>®</sup> 546 (sc-166957 AF546), Alexa Fluor<sup>®</sup> 594 (sc-166957 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-166957 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-166957 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-166957 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

SNX17 (H-10) is recommended for detection of SNX17 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SNX17 siRNA (h): sc-61587, SNX17 siRNA (m): sc-61588, SNX17 shRNA Plasmid (h): sc-61587-SH, SNX17 shRNA Plasmid (m): sc-61588-SH, SNX17 shRNA (h) Lentiviral Particles: sc-61587-V and SNX17 shRNA (m) Lentiviral Particles: sc-61588-V.

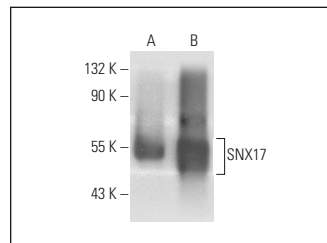
Molecular Weight of SNX17: 53 kDa.

Positive Controls: ES-2 cell lysate: sc-24674, SNX17 (h): 293T Lysate: sc-116283 or SNX17 (m): 293T Lysate: sc-123694.

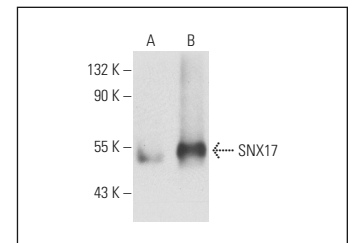
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



SNX17 (H-10): sc-166957. Western blot analysis of SNX17 expression in non-transfected: sc-117752 (A) and human SNX17 transfected: sc-116283 (B) 293T whole cell lysates.



SNX17 (H-10): sc-166957. Western blot analysis of SNX17 expression in non-transfected: sc-117752 (A) and mouse SNX17 transfected: sc-123694 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

- Bergant Marusic, M., et al. 2012. Human papillomavirus L2 facilitates viral escape from late endosomes via sorting nexin 17. *Traffic* 13: 455-467.
- Stiegler, A.L., et al. 2014. Structural determinants for binding of sorting nexin 17 (SNX17) to the cytoplasmic adaptor protein Krev interaction trapped 1 (KRIT1). *J. Biol. Chem.* 289: 25362-25373.
- Osborne, D.G., et al. 2015. SNX17 affects T cell activation by regulating TCR and integrin recycling. *J. Immunol.* 194: 4555-4566.
- Bergant, M., et al. 2017. Characterizing the spatio-temporal role of sorting nexin 17 in human papillomavirus trafficking. *J. Gen. Virol.* 98: 715-725.
- Halloran, M., et al. 2019. Amyotrophic lateral sclerosis-linked UBQLN2 mutants inhibit endoplasmic reticulum to Golgi transport, leading to Golgi fragmentation and ER stress. *Cell. Mol. Life Sci.* 77: 3859-3873.
- Pim, D., et al. 2020. Human Papillomavirus type 16 L2 recruits both retromer and retriever complexes during retrograde trafficking of the viral genome to the cell nucleus. *J. Virol.* E-published.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.