

SNX16 (m): 293T Lysate: sc-123693

BACKGROUND

Sorting nexin proteins (SNX) are members of a large family of hydrophilic proteins that interact with a variety of receptor types, contain a characteristic phox homology (PX) domain and play a role in intracellular trafficking. Viral infection by a nucleocapsid is initiated when it is transported to late endosomes and, ultimately, to the cytoplasm. This process depends on the late endosomal lipid lysobisphosphatidic acid (LBPA) and its putative effector Alix/AIP1, and is regulated by PtdIns3P (phosphatidylinositol-3-phosphate) signaling via SNX16, its binding protein. Overexpression of SNX16 increases the rate of EGF-induced EGFR degradation and prevents EGF-induced upmodulation of ERK and serum response element (SRE). Mutation in the PX domain eradicates the inhibitory effect of SNX16 on EGF-induced activation of ERK and SRE, suggesting that SNX16 directs the sorting of EGFR to the endosomal compartment, thus regulating EGF-induced cell signaling.

REFERENCES

1. Hanson, B.J. and Hong, W. 2003. Evidence for a role of SNX16 in regulating traffic between the early and later endosomal compartments. *J. Biol. Chem.* 278: 34617-34630.
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3. Watahiki, A., Waki, K., Hayatsu, N., Shiraki, T., Kondo, S., Nakamura, M., Sasaki, D., Arakawa, T., Kawai, J., Harbers, M., Hayashizaki, Y. and Carninci, P. 2004. Libraries enriched for alternatively spliced exons reveal splicing patterns in melanocytes and melanomas. *Nat. Methods* 1: 233-239.
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CHROMOSOMAL LOCATION

Genetic locus: Snx16 (mouse) mapping to 3 A1.

PRODUCT

SNX16 (m): 293T Lysate represents a lysate of mouse SNX16 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

SNX16 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SNX16 antibodies. Recommended use: 10-20 µl per lane.

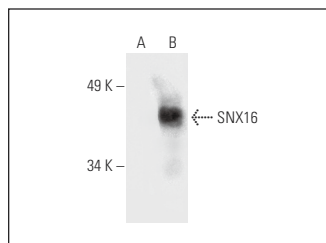
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

SNX16 (C-11): sc-271260 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse SNX16 expression in SNX16 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

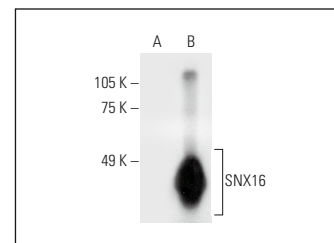
RECOMMENDED SUPPORT REAGENTS

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™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



SNX16 (C-11): sc-271260. Western blot analysis of SNX16 expression in non-transfected: sc-117752 (A) and mouse SNX16 transfected: sc-123693 (B) 293T whole cell lysates.



SNX16 (B-4): sc-390523. Western blot analysis of SNX16 expression in non-transfected: sc-117752 (A) and mouse SNX16 transfected: sc-123693 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.