# SNX9 (Y-20): sc-49145



The Power to Question

## **BACKGROUND**

Sorting nexin proteins (SNX) are members of a large family of hydrophilic PX (phospholipid-binding motif) domain-containing proteins that interact with a variety of receptor types. SNXs are widely expressed, although the tissue distribution of each SNX mRNA varies. The ability of SNXs to bind specific phospholipids, as well as their tendency to form protein-protein complexes, suggests a role for these proteins in cellular membrane trafficking and protein sorting. SNXs may also function specifically in pro-degradative sorting, internalization, endosomal recycling or simply in endosomal sorting. SNXs partially associate with cellular membranes, despite their hydrophilic nature. SNX9 resides in the cytosol where it influences the processing and trafficking of Insulin receptors. The enzyme aldolase binds to and inactivates SNX9. Phosphorylation of SNX9 releases aldolase and frees SNX9 to recruit and activate Dynamin II, a neuronal phosphoprotein and a GTPase enzyme which mediates late stages of endocytosis in both neural and non-neural cells.

## **REFERENCES**

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## **CHROMOSOMAL LOCATION**

Genetic locus: SNX9 (human) mapping to 6q25.3; Snx9 (mouse) mapping to 17 A1.

## **SOURCE**

SNX9 (Y-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SNX9 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49145 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

SNX9 (Y-20) is recommended for detection of SNX9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

SNX9 (Y-20) is also recommended for detection of SNX9 in additional species, including equine, canine, bovine, porcine and avian.

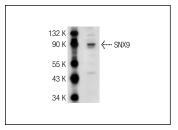
Suitable for use as control antibody for SNX9 siRNA (h): sc-61597, SNX9 siRNA (m): sc-61598, SNX9 shRNA Plasmid (h): sc-61597-SH, SNX9 shRNA Plasmid (m): sc-61598-SH, SNX9 shRNA (h) Lentiviral Particles: sc-61597-V and SNX9 shRNA (m) Lentiviral Particles: sc-61598-V.

Molecular Weight (predicted) of SNX9: 67 kDa.

Molecular Weight (observed) of SNX9: 96 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243.

#### DATA



SNX9 (Y-20): sc-49145. Western blot analysis of SNX9 expression in 3T3-L1 whole cell lysate.

#### **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



Try **SNX9 (G-5): sc-166863**, our highly recommended monoclonal alternative to SNX9 (Y-20).