# SNX9 (S-20): sc-49144

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## 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 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SNX9 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49144 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SNX9 (S-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), 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 (S-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.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## 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.

## PROTOCOLS

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