



# SNX12 siRNA (h): sc-90944

## BACKGROUND

SNX12 (sorting nexin 12) is a 172 amino acid member of the sorting nexin (SNX) family of hydrophilic proteins that interact with a variety of receptors and are involved in intracellular trafficking events. Like other members of the sorting nexin family, SNX12 contains one phox (PX) domain which is a conserved motif that functions in phosphoinositide binding, signal transduction, growth factor receptor degradation and NADPH oxidase activity. Via its PX domain, SNX12 is thought to be involved in multiple stages of intracellular trafficking and endocytosis through membranous compartments. Two isoforms of SNX12 exist due to alternative splicing events.

## REFERENCES

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- Carlton, J., Bujny, M., Rutherford, A. and Cullen, P. 2005. Sorting nexins—unifying trends and new perspectives. *Traffic* 6: 75-82.
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## CHROMOSOMAL LOCATION

Genetic locus: SNX12 (human) mapping to Xq13.1.

## PRODUCT

SNX12 siRNA (h) is a pool of 2 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SNX12 shRNA Plasmid (h): sc-90944-SH and SNX12 shRNA (h) Lentiviral Particles: sc-90944-V as alternate gene silencing products.

For independent verification of SNX12 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-90944A and sc-90944B.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNases and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

SNX12 siRNA (h) is recommended for the inhibition of SNX12 expression in human cells.

## SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10  $\mu$ M in 66  $\mu$ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

## GENE EXPRESSION MONITORING

SNX12 (42-Y): sc-101308 is recommended as a control antibody for monitoring of SNX12 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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. 2) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor SNX12 gene expression knockdown using RT-PCR Primer: SNX12 (h)-PR: sc-90944-PR (20  $\mu$ l, 413 bp). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.