

# SUHW3 siRNA (h): sc-90954

## BACKGROUND

SUHW3 (suppressor of hairy wing homolog 3), also known as ZNF280C (zinc finger protein 280C) or ZNF633 (zinc finger protein 633), is a 737 amino acid nuclear protein that contains five C<sub>2</sub>H<sub>2</sub>-type zinc fingers and may function as a transcription factor. Upon DNA damage, SUHW3 becomes phosphorylated, most likely by Atm or ATR. The SUHW3 gene contains 66,250 bases, encodes 3 transcripts and maps to human chromosome Xq26.1. The X chromosome is one of the human sex chromosomes, which consists of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males most frequently, as males carry a single X chromosome. Turner's syndrome and triple X syndrome are two heritable conditions that can occur as a result of an unusual number of X chromosomes.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ZNF280C (human) mapping to Xq26.1.

## PROTOCOLS

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

## PRODUCT

SUHW3 siRNA (h) is a pool of 3 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 SUHW3 shRNA Plasmid (h): sc-90954-SH and SUHW3 shRNA (h) Lentiviral Particles: sc-90954-V as alternate gene silencing products.

For independent verification of SUHW3 (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-90954A, sc-90954B and sc-90954C.

## 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

SUHW3 siRNA (h) is recommended for the inhibition of SUHW3 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.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor SUHW3 gene expression knockdown using RT-PCR Primer: SUHW3 (h)-PR: sc-90954-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

## RESEARCH USE

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