SANTA CRUZ BIOTECHNOLOGY, INC.

# SNF2L siRNA (h): sc-76532

## BACKGROUND

SNF2L, also known as SMARCA1 (SWI/SNF related, matrix associated, Actin dependent regulator of chromatin, subfamily a, member 1), SWI or ISWI, is a 1,054 amino acid protein that localizes to the nucleus and contains one helicase C-terminal domain, one helicase ATP-binding domain and two SANT domains. Expressed as multiple alternatively spliced isoforms, SNF2L exists as a component of the nucleosome-remodeling factor (NURF) complex where it helps to facilitate the ATP-dependent perturbation of chromatin structure and may also be involved in brain development and neurite outgrowth. The gene encoding SNF2L maps to human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes.

## REFERENCES


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2. Lazzaro, M.A. and Picketts, D.J. 2001. Cloning and characterization of the murine Imitation Switch (ISWI) genes: differential expression patterns suggest distinct developmental roles for SNF2H and SNF2L. J. Neurochem. 77: 1145-1156.
3. Barak, O., Lazzaro, M.A., Lane, W.S., Speicher, D.W., Picketts, D.J. and Shiekhattar, R. 2003. Isolation of human NURF: a regulator of Engrailed gene expression. EMBO J. 22: 6089-6100.
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5. Wang, F., Zhang, R., Beischlag, T.V., Muchardt, C., Yaniv, M. and Hankinson, O. 2004. Roles of Brahma and Brahma/SWI2-related gene 1 in hypoxic induction of the erythropoietin gene. J. Biol. Chem. 279: 46733-46741.
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## CHROMOSOMAL LOCATION

Genetic locus: SMARCA1 (human) mapping to Xq25.

## PRODUCT

SNF2L 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SNF2L shRNA Plasmid (h): sc-76532-SH and SNF2L shRNA (h) Lentiviral Particles: sc-76532-V as alternate gene silencing products.

For independent verification of SNF2L (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-76532A, sc-76532B and sc-76532C.

## 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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

SNF2L siRNA (h) is recommended for the inhibition of SNF2L 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 µM in 66 µl. 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

SNF2L (H-3): sc-518199 is recommended as a control antibody for monitoring of SNF2L 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-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. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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 SNF2L gene expression knockdown using RT-PCR Primer: SNF2L (h)-PR: sc-76532-PR (20 µl). 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.

## PROTOCOLS

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