SANTA CRUZ BIOTECHNOLOGY, INC.

ZCCHC8 siRNA (h): sc-96061

BACKGROUND

Spliceosomes are multi-protein complexes that are composed of snRNPs (small nuclear ribonucleoproteins) and a variety of associated protein factors, all of which work in concert to regulate the splicing of pre-mRNA. ZCCHC8 (zinc finger CCHC domain-containing protein 8) is a 707 amino acid protein that contains one CCHC-type zinc finger domain through which it can bind DNA/RNA and participate in transcriptional activation or repression events within the nucleus. Specifically, ZCCHC8 functions as a component of the spliceosome complex and is thought to be involved in pre-mRNA splicing. Upon DNA damage, ZCCHC8 may be phosphorylated by Atm or ATR. Two isoforms of ZCCHC8 are expressed due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ZCCHC8 (human) mapping to 12q24.31.

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.

PRODUCT

ZCCHC8 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 ZCCHC8 shRNA Plasmid (h): sc-96061-SH and ZCCHC8 shRNA (h) Lentiviral Particles: sc-96061-V as alternate gene silencing products.

For independent verification of ZCCHC8 (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-96061A, sc-96061B and sc-96061C.

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

ZCCHC8 siRNA (h) is recommended for the inhibition of ZCCHC8 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor ZCCHC8 gene expression knockdown using RT-PCR Primer: ZCCHC8 (h)-PR: sc-96061-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.