SANTA CRUZ BIOTECHNOLOGY, INC.

ZDHHC14 siRNA (h): sc-95174

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. ZDHHC14 (zinc finger, DHHC-type containing 14), also known as DHHC-14 or NEW1CP, is a 488 amino acid multi-pass membrane protein that contains one DHHC-type zinc finger. The DHHC domain is required for the primary function of ZDHHC14 as a palmitoyltransferase, to catalyze the transfermation of palmitoyl-CoA and a cysteine-conjugated protein to an S-palmitoyl protein and free CoA. The gene encoding ZDHHC14 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome. Two isoforms of ZDHHC14 exist as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ZDHHC14 (human) mapping to 6q25.3.

PRODUCT

ZDHHC14 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 ZDHHC14 shRNA Plasmid (h): sc-95174-SH and ZDHHC14 shRNA (h) Lentiviral Particles: sc-95174-V as alternate gene silencing products.

For independent verification of ZDHHC14 (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-95174A, sc-95174B and sc-95174C.

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

ZDHHC14 siRNA (h) is recommended for the inhibition of ZDHHC14 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 ZDHHC14 gene expression knockdown using RT-PCR Primer: ZDHHC14 (h)-PR: sc-95174-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.