ZCCHC17 siRNA (h): sc-88347



The Power to Question

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. ZCCHC17 (zinc finger, CCHC domain containing 17), also known as PS1D (putative S1 RNA-binding domain protein), Pnn (Pinin)-interacting nucleolar protein or pNO40, is a 241 amino acid protein that associates with both Pinin and the 60S ribosomal subunit. Localizing to nucleolus, ZCCHC17 is ubiquitously expressed and has been suggested to play a role in ribosome maturation and biogenesis. ZCCHC17 contains one CCHC-type zinc finger, a S1 motif domain and exists as two alternatively spliced isoforms that map to human chromosome 1p35.2. Human chromosome 1 spans 260 million base pairs, contains over 3,000 genes, comprises nearly 8% of the human genome and houses a large number of disease-associated genes, including those that are involved in Stickler syndrome, Parkinson's disease, Gaucher disease and Usher syndrome.

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: ZCCHC17 (human) mapping to 1p35.2.

PRODUCT

ZCCHC17 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ZCCHC17 shRNA Plasmid (h): sc-88347-SH and ZCCHC17 shRNA (h) Lentiviral Particles: sc-88347-V as alternate gene silencing products.

For independent verification of ZCCHC17 (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-88347A, sc-88347B and sc-88347C.

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

APPLICATIONS

ZCCHC17 siRNA (h) is recommended for the inhibition of ZCCHC17 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 ZCCHC17 gene expression knockdown using RT-PCR Primer: ZCCHC17 (h)-PR: sc-88347-PR (20 μ 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.

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