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THAP10 siRNA (h): sc-89977

BACKGROUND

Members of the THAP (Thanatos-associated protein) family of proteins contain a well conserved DNA-binding domain designated THAP-type zinc finger motif. Proteins containing the THAP-type zinc finger motif are commonly involved in transcriptional regulation, cell-cycle control, apoptosis and chromatin modification. The THAP-type zinc finger domain is suggested to have similarities with the site-specific DNA-binding domain (DBD) of *Drosophila* P element transposase. The conservation of the C2CH signature of residues, (Cys-Xaa(2-4)-Cys-Xaa(35-50)-Cys-Xaa(2)-His), define the THAP domain. THAP10 (THAP domain containing 10) is a 257 amino acid protein containing one THAP-type zinc finger and is encoded by a gene located on human chromosome 15q23.

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CHROMOSOMAL LOCATION

Genetic locus: THAP10 (human) mapping to 15q23.

PRODUCT

THAP10 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 THAP10 shRNA Plasmid (h): sc-89977-SH and THAP10 shRNA (h) Lentiviral Particles: sc-89977-V as alternate gene silencing products.

For independent verification of THAP10 (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-89977A, sc-89977B and sc-89977C.

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

THAP10 siRNA (h) is recommended for the inhibition of THAP10 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 THAP10 gene expression knockdown using RT-PCR Primer: THAP10 (h)-PR: sc-89977-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.