

ZMYM5 siRNA (h): sc-76973

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. ZMYM5 (zinc finger, MYM-type 5), also known as ZNF237, HSPC050 or ZNF198L1, is a 669 amino acid nuclear protein that contains four MYM-type zinc fingers. ZMYM5 is thought to be a transcriptional regulator that interacts with ERM (also known as ETV5 or ETS translocation variant 5) and represses transcript of PS1 (human presenilin 1). Single nucleotide mutations at positions 112 and 114 abolish the ability of ZMYM5 to interact with ERM, though only the mutation at 112 abolishes the repression of PS1 expression, and a mutation at position 120 has been associated up increased PS1 repression activity. There are five isoforms of ZMYM5 that are produced as a result of alternative splicing events. The gene encoding ZMYM5 maps to chromosome 13q12.11.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ZMYM5 (human) mapping to 13q12.11.

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

ZMYM5 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 ZMYM5 shRNA Plasmid (h): sc-76973-SH and ZMYM5 shRNA (h) Lentiviral Particles: sc-76973-V as alternate gene silencing products.

For independent verification of ZMYM5 (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-76973A, sc-76973B and sc-76973C.

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

ZMYM5 siRNA (h) is recommended for the inhibition of ZMYM5 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 μ M in 66 μ l. 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 ZMYM5 gene expression knockdown using RT-PCR Primer: ZMYM5 (h)-PR: sc-76973-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.