

▶ HDDC3 siRNA (h): sc-90180

BACKGROUND

Enzymes consisting of an HD domain are predicted to exhibit phosphohydrolase activity. These enzymes are suggested to participate in nucleic acid metabolism, signal transduction and possibly other functions in bacteria, archaea and eukaryotes. The HD domain consists of highly conserved residues, specifically histidines or aspartates. HDDC3 (HD domain containing 3) is a 179 amino acid protein belonging to the HDDC3 family and contains one HD domain. Existing as two alternatively spliced isoforms, HDDC3 is encoded by a gene located on human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HDDC3 (human) mapping to 15q26.1.

PROTOCOLS

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

PRODUCT

HDDC3 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 HDDC3 shRNA Plasmid (h): sc-90180-SH and HDDC3 shRNA (h) Lentiviral Particles: sc-90180-V as alternate gene silencing products.

For independent verification of HDDC3 (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-90180A, sc-90180B and sc-90180C.

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

HDDC3 siRNA (h) is recommended for the inhibition of HDDC3 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 HDDC3 gene expression knockdown using RT-PCR Primer: HDDC3 (h)-PR: sc-90180-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.