SANTA CRUZ BIOTECHNOLOGY, INC.

HDDC2 siRNA (m): sc-145912

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. HDDC2 (HD domain-containing protein 2), also known as hepatitis C virus NS5A-transactivated protein 2, C6orf74, NS5ATP2 or CGI-130, is a 204 amino acid protein that contains one HD domain and belongs to the HDDC2 family. Existing as three alternatively spliced isoforms, the gene encoding HDDC2 maps to human chromosome 6q22.31. Making up nearly 6% of the human genome, chromosome 6 contains around 1,200 genes within 170 million base pairs of sequence. Porphyria cutanea tarda, Parkinson's disease and Stickler syndrome have all been associated with genes located on chromosome 6.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Hddc2 (mouse) mapping to 10 A4.

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

HDDC2 siRNA (m) 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 HDDC2 shRNA Plasmid (m): sc-145912-SH and HDDC2 shRNA (m) Lentiviral Particles: sc-145912-V as alternate gene silencing products.

For independent verification of HDDC2 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-145912A, sc-145912B and sc-145912C.

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

HDDC2 siRNA (m) is recommended for the inhibition of HDDC2 expression in mouse 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 HDDC2 gene expression knockdown using RT-PCR Primer: HDDC2 (m)-PR: sc-145912-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.