



## DMWD siRNA (h): sc-97432

### BACKGROUND

DMWD (dystrophia myotonica WD repeat-containing protein), also known as DM9, protein 59 or protein DMR-N9, is a 674 amino acid protein containing five WD repeats. DMWD may play a role in the development of mental symptoms in severe cases of myotonic dystrophy, a chronic multisystemic disease characterized by wasting of the muscles, heart conduction defects, cataracts, endocrine changes and myotonia. The DMWD gene is located upstream of the DMPK gene and is prominently expressed in tissues affected in myotonic dystrophy patients. DMWD may also contribute to regulation in meiosis. DMWD is expressed in kidney and spleen, with strongest expression in brain, liver and testis. The gene encoding DMWD maps to human chromosome 19q13.32 and mouse chromosome 7 A3.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: DMWD (human) mapping to 19q13.32.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

### PRODUCT

DMWD 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see DMWD shRNA Plasmid (h): sc-97432-SH and DMWD shRNA (h) Lentiviral Particles: sc-97432-V as alternate gene silencing products.

For independent verification of DMWD (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-97432A, sc-97432B and sc-97432C.

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

### APPLICATIONS

DMWD siRNA (h) is recommended for the inhibition of DMWD 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  $\mu$ M in 66  $\mu$ 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 DMWD gene expression knockdown using RT-PCR Primer: DMWD (h)-PR: sc-97432-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.