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# ZMYM3 siRNA (m): sc-155631



The Power to Question

## 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. ZMYM3 (zinc finger MYM-type protein 3), also known as ZNF261 (zinc finger protein 261), XFIIM, DXS6673E or MYM, is a 1,370 amino acid nuclear protein that contains nine MYM-type zinc fingers. Expressed in a variety of tissues, including heart, muscle and brain, ZMYM3 is thought to function as part of a histone deacetylase-containing complex that contains other proteins, such as HDAC1 and HDAC2, and may play a role in gene silencing through the modification of chromatin structure. Defects in the gene encoding ZMYM3 that lead to chromosomal translocations may be a cause of X-linked mental retardation. Two isoforms of ZMYM3 exist due to alternative splicing events.

## REFERENCES

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4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 300061. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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## CHROMOSOMAL LOCATION

Genetic locus: Zmym3 (mouse) mapping to X D.

## PRODUCT

ZMYM3 siRNA (m) is a target-specific 19-25 nt siRNA 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 ZMYM3 shRNA Plasmid (m): sc-155631-SH and ZMYM3 shRNA (m) Lentiviral Particles: sc-155631-V as alternate gene silencing products.

## 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

ZMYM3 siRNA (m) is recommended for the inhibition of ZMYM3 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 ZMYM3 gene expression knockdown using RT-PCR Primer: ZMYM3 (m)-PR: sc-155631-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.

## PROTOCOLS

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