

MAMLD1 siRNA (h): sc-91240

BACKGROUND

MAMLD1 (mastermind-like domain-containing protein 1), also known as CXorf6, CG1 or F18, is a 701 amino acid member of the mastermind family of proteins. Expressed in brain, heart and skeletal muscle, MAMLD1 co-localizes with MAML2 (Mastermind-like protein 2) to nuclear bodies and is thought to function as a transcriptional co-activator that enhances promoter function. Via its ability to promote transcription, MAMLD1 may regulate testosterone production, possibly playing a role in developmental events, such as spermatogenesis. Defects in the gene encoding MAMLD1 are the cause of X-linked hypospadias, a complex disorder in which the urethra opens on the central side of the penis. Multiple isoforms of MAMLD1 exist due to alternative splicing.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MAMLD1 (human) mapping to Xq28.

PROTOCOLS

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

PRODUCT

MAMLD1 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 MAMLD1 shRNA Plasmid (h): sc-91240-SH and MAMLD1 shRNA (h) Lentiviral Particles: sc-91240-V as alternate gene silencing products.

For independent verification of MAMLD1 (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-91240A, sc-91240B and sc-91240C.

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

MAMLD1 siRNA (h) is recommended for the inhibition of MAMLD1 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 MAMLD1 gene expression knockdown using RT-PCR Primer: MAMLD1 (h)-PR: sc-91240-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.