

ZC3H12B siRNA (m): sc-155461

BACKGROUND

The zinc finger CCCH domain-containing protein 12B (ZC3H12B), also known as MCP2 (MCP-induced protein 2), is an 825 amino acid protein that contains one C3H1-type zinc finger and belongs to the ZC3H12 family. ZC3H12B is suggested to function as an RNase, and thereby modifies levels of target RNA. Existing as two alternatively spliced isoforms, ZC3H12B binds magnesium as a cofactor and is expressed in murine fetal heart. The gene encoding ZC3H12B maps to human chromosome Xq12 and mouse chromosome X C3. Chromosome X consists of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia, and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently as males carry a single X chromosome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Zc3h12b (mouse) mapping to X C3.

PRODUCT

ZC3H12B 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ZC3H12B shRNA Plasmid (m): sc-155461-SH and ZC3H12B shRNA (m) Lentiviral Particles: sc-155461-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 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

ZC3H12B siRNA (m) is recommended for the inhibition of ZC3H12B 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 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 ZC3H12B gene expression knockdown using RT-PCR Primer: ZC3H12B (m)-PR: sc-155461-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.

PROTOCOLS

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