



OTTMUSG00000010173 siRNA (m): sc-151583

BACKGROUND

OTTMUSG00000010173, also known as Gm13051 or RP23-383I4.2, is a 633 amino acid protein encoded by a gene that maps to mouse chromosome 4 E1. The human homolog to OTTMUSG00000010173, ZNF41 (zinc finger protein 41), is an 821 amino acid nuclear protein that exists as eight alternatively spliced isoforms and may be involved in transcriptional regulation. Belonging to the Krüppel C₂H₂-type zinc finger protein family, ZNF41 contains 18 C₂H₂-type zinc fingers and one KRAB domain. The gene that encodes ZNF41 consists of approximately 37,068 bases and maps to human chromosome Xp11.23. Defects in ZNF41 are the cause of mental retardation X-linked type 89 (MRX89). Mental retardation is characterized by significantly subaverage general intellectual functioning associated with impairments in adaptive behavior and manifested during the developmental period. Non-syndromic mental retardation patients do not manifest other clinical signs.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Gm13051 (mouse) mapping to 4 E1.

PROTOCOLS

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

PRODUCT

OTTMUSG00000010173 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 OTTMUSG00000010173 shRNA Plasmid (m): sc-151583-SH and OTTMUSG00000010173 shRNA (m) Lentiviral Particles: sc-151583-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

OTTMUSG00000010173 siRNA (m) is recommended for the inhibition of OTTMUSG00000010173 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 OTTMUSG00000010173 gene expression knockdown using RT-PCR Primer: OTTMUSG00000010173 (m)-PR: sc-151583-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.