

cyclin M4 siRNA (h): sc-77065

BACKGROUND

Cyclin M4 (also designated metal transporter CNNM4, ancient conserved domain-containing protein 4) is a 775 amino acid protein encoded by the human gene CNNM4. Cyclin M4 belongs to the ACDP family and contains one CBS domain. Cyclin M4 is a probable metal transporter. The interaction of cyclin M4 with the metal ion chaperone COX11 also suggests that it may play a role in sensory neuron functions. Cyclin M4 is a multi-pass membrane protein that is widely expressed with high expression found in heart. The name of the protein is derived from the weak sequence similarity it shares with the cyclin family, however, cyclin M4 has no cyclin-like function *in vivo*.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CNNM4 (human) mapping to 2q11.2.

PRODUCT

cyclin M4 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 cyclin M4 shRNA Plasmid (h): sc-77065-SH and cyclin M4 shRNA (h) Lentiviral Particles: sc-77065-V as alternate gene silencing products.

For independent verification of cyclin M4 (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-77065A, sc-77065B and sc-77065C.

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

cyclin M4 siRNA (h) is recommended for the inhibition of cyclin M4 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 cyclin M4 gene expression knockdown using RT-PCR Primer: cyclin M4 (h)-PR: sc-77065-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.