

MANEA siRNA (m): sc-149249

BACKGROUND

MANEA (mannosidase, endo- α), also known as Mandaselin, glycoprotein endo- α -1,2-mannosidase, endomannosidase or ENDO, is a 462 amino acid single-pass type II membrane protein of the Golgi apparatus that cleaves the α -1,2-mannosidic bonds linking mono-, di- and triglycosylmannose oligosaccharides to high-mannose glycans, thereby catalyzing their release. A member of the glycosyl hydrolase 99 family and subject to C-terminal post-translational proteolytic cleavage, MANEA is highly expressed in kidney and liver, with lower levels of expression in brain, placenta, lung, muscle, heart and pancreas. The gene encoding MANEA maps to human chromosome 6q16.1, and is considered a potential candidate in cocaine-induced paranoia (CIP).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Manea (mouse) mapping to 4 A3.

PRODUCT

MANEA siRNA (m) 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 MANEA shRNA Plasmid (m): sc-149249-SH and MANEA shRNA (m) Lentiviral Particles: sc-149249-V as alternate gene silencing products.

For independent verification of MANEA (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-149249A, sc-149249B and sc-149249C.

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

MANEA siRNA (m) is recommended for the inhibition of MANEA 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 MANEA gene expression knockdown using RT-PCR Primer: MANEA (m)-PR: sc-149249-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.