SANTA CRUZ BIOTECHNOLOGY, INC.

MEGF11 siRNA (h): sc-89997

BACKGROUND

MEGF11 (multiple epidermal growth factor-like domains protein 11) is a 1,044 amino acid single-pass type I membrane protein that belongs to the MEGF family. MEGF11 exists as a homopolymer that primarily localizes to protruding lamellipodia in an irregular, mosaic-like adhesion pattern. Expressed at high levels in adult and fetal brain and adult spinal cord, MEGF11 is found at lower levels in kidney, ovary and heart. MEGF11 contains fourteen EGF-like domains, one EMI domain, and undergoes alternative splicing events to produce four isoforms. The gene encoding MEGF11 maps to human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MEGF11 (human) mapping to 15q22.31.

PROTOCOLS

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

PRODUCT

MEGF11 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see MEGF11 shRNA Plasmid (h): sc-89997-SH and MEGF11 shRNA (h) Lentiviral Particles: sc-89997-V as alternate gene silencing products.

For independent verification of MEGF11 (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-89997A, sc-89997B and sc-89997C.

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

MEGF11 siRNA (h) is recommended for the inhibition of MEGF11 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 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 MEGF11 gene expression knockdown using RT-PCR Primer: MEGF11 (h)-PR: sc-89997-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.