SANTA CRUZ BIOTECHNOLOGY, INC.

SEZ6L siRNA (h): sc-76487

BACKGROUND

SEZ6L (seizure related 6 homolog-like) is a 1,024 amino acid single-pass type I membrane protein that localizes to the endoplasmic reticulum. Widely expressed, SEZ6L is a candidate tumor suppressor gene and may contribute to specialized endoplasmic reticulum functions in neurons. SEZ6L contains three CUB domains and five sushi (CCP/SCR) domains, which may be involved in protein-protein interactions and signal transduction. The gene encoding SEZ6L is located on human chromosome 22, which houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, Neurofibromatosis type 2, autism and schizophrenia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SEZ6L (human) mapping to 22q12.1.

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.

PRODUCT

SEZ6L 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 SEZ6L shRNA Plasmid (h): sc-76487-SH and SEZ6L shRNA (h) Lentiviral Particles: sc-76487-V as alternate gene silencing products.

For independent verification of SEZ6L (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-76487A, sc-76487B and sc-76487C.

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

SEZ6L siRNA (h) is recommended for the inhibition of SEZ6L 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 SEZ6L gene expression knockdown using RT-PCR Primer: SEZ6L (h)-PR: sc-76487-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.