

Sel-1L3 siRNA (h): sc-88873

BACKGROUND

Sel-1L3 (sel-1 suppressor of lin-12-like 3) is a 1,132 amino acid single-pass membrane protein that contains eight Sel1-like repeats. Existing as three alternatively spliced isoforms, the Sel-1L3 gene is conserved in chimpanzee, canine, mouse, rat, chicken and zebrafish, and maps to human chromosome 4p15.2. Several independent linkage studies have identified chromosome 4p15-p16 as a putative region of susceptibility for bipolar disorder, schizophrenia and related phenotypes. Representing approximately 6% of the human genome, chromosome 4 contains nearly 900 genes. Notably, the Huntington gene, which is found to encode an expanded glutamine tract in cases of Huntington's disease, is on chromosome 4. FGFR-3 is also encoded on chromosome 4 and has been associated with thanatophoric dwarfism, achondroplasia, Muenke syndrome and bladder cancer. Chromosome 4 is also tied to Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: SEL1L3 (human) mapping to 4p15.2.

PRODUCT

Sel-1L3 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 Sel-1L3 shRNA Plasmid (h): sc-88873-SH and Sel-1L3 shRNA (h) Lentiviral Particles: sc-88873-V as alternate gene silencing products.

For independent verification of Sel-1L3 (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-88873A, sc-88873B and sc-88873C.

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

Sel-1L3 siRNA (h) is recommended for the inhibition of Sel-1L3 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 Sel-1L3 gene expression knockdown using RT-PCR Primer: Sel-1L3 (h)-PR: sc-88873-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.