

PDZK4 siRNA (h): sc-91134

BACKGROUND

PDZK4 (PDZ domain containing 4), also known as PDZRN4L (PDZ domain-containing RING finger protein 4-like protein) or LU1, is a 769 amino acid coiled-coil protein that contains one PDZ (DHR) domain. Encoded by a gene that maps to human chromosome Xq28, PDZK4 is conserved in canine, bovine, mouse, rat and zebrafish. PDZK4 localizes to cytoplasm and is expressed specifically in adult and fetal brain. PDZK4 functions as an oncogene and is up-regulated in synovial carcinomas. Treatment of synovial sarcoma cells with small interfering RNA (siRNA) inhibits PDZK4 expression, resulting in tumor-cell growth suppression, suggesting that inappropriate expression of PDZK4 may play a role synovial sarcoma cell proliferation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PDZD4 (human) mapping to Xq28.

PRODUCT

PDZK4 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 PDZK4 shRNA Plasmid (h): sc-91134-SH and PDZK4 shRNA (h) Lentiviral Particles: sc-91134-V as alternate gene silencing products.

For independent verification of PDZK4 (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-91134A, sc-91134B and sc-91134C.

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

PDZK4 siRNA (h) is recommended for the inhibition of PDZK4 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 PDZK4 gene expression knockdown using RT-PCR Primer: PDZK4 (h)-PR: sc-91134-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.