SANTA CRUZ BIOTECHNOLOGY, INC.

NYD-SP17 siRNA (h): sc-77935

BACKGROUND

NYD-SP17, also known as coiled-coil domain-containing protein 54 or testis development protein NYD-SP17, is a 328 amino acid protein that is phosphorylated on threonine 182 during post-translational modification. The gene encoding NYD-SP17 maps to human chromosome 3q13.12 and mouse chromosome 16 B5. Human chromosome 3 houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

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5. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification]. Mol. Biol. 37: 194-211.
6. Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. Genomics 83: 193-202.
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CHROMOSOMAL LOCATION

Genetic locus: CCDC54 (human) mapping to 3q13.12.

PRODUCT

NYD-SP17 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 NYD-SP17 shRNA Plasmid (h): sc-77935-SH and NYD-SP17 shRNA (h) Lentiviral Particles: sc-77935-V as alternate gene silencing products.

For independent verification of NYD-SP17 (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-77935A, sc-77935B and sc-77935C.

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

NYD-SP17 siRNA (h) is recommended for the inhibition of NYD-SP17 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 NYD-SP17 gene expression knockdown using RT-PCR Primer: NYD-SP17 (h)-PR: sc-77935-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.

PROTOCOLS

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