SANTA CRUZ BIOTECHNOLOGY, INC.

D55 siRNA (h): sc-92650

BACKGROUND

D55 (tumor protein D55), also known as TPD52L3 (tumor protein D52-like 3) or testis development protein NYD-SP25, is a 140 amino acid member of the tumor protein D52-like (TPD52) family of proteins. TPD52 protein family members are characterized by an N-terminal coiled-coil motif responsible for the binding of other TPD52 family proteins to form homo- and heteromeric complexes. Expressed specifically in testis, D55 may play a role in spermatogenesis. D55 is expressed as three isoforms produced by alternative splicing events. The gene that encodes D55 maps to human chromosome 9p24.1. Chromosome 9 consists of about 145 million bases and 4% of the human genome and encodes nearly 900 genes. Hereditary hemorrhagic telangiectasia and familial dysautonomia are both diseases associated with chromosome 9.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TPD52L3 (human) mapping to 9p24.1.

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

D55 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 D55 shRNA Plasmid (h): sc-92650-SH and D55 shRNA (h) Lentiviral Particles: sc-92650-V as alternate gene silencing products.

For independent verification of D55 (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-92650A, sc-92650B and sc-92650C.

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

D55 siRNA (h) is recommended for the inhibition of D55 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 D55 gene expression knockdown using RT-PCR Primer: D55 (h)-PR: sc-92650-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.