SANTA CRUZ BIOTECHNOLOGY, INC.

Speedy C siRNA (h): sc-96329

BACKGROUND

Speedy C, also known as SPDYC, rapid inducer of G_2/M progression in oocytes C, RINGO C or hSpy/Ringo C, is a 293 amino acid protein belonging to the Speedy/Ringo family. Localizing to nucleus, Speedy C is expressed in a variety of tissues including bone marrow, kidney, small intestine, liver, placenta and testis. Speedy C promotes cell cycle progression during late S and G_2 phases by binding and activating CDK1 and CDK2. CDK2 activation requires the C-terminus of Speedy C be present. Speedy C may also be involved in the spindle-assembly checkpoint (SAC). The gene encoding Speedy C maps to human chromosome 11q13.1. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: SPDYC (human) mapping to 11q13.1.

PRODUCT

Speedy C siRNA (h) is a target-specific 19-25 nt siRNA 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 Speedy C shRNA Plasmid (h): sc-96329-SH and Speedy C shRNA (h) Lentiviral Particles: sc-96329-V as alternate gene silencing products.

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

Speedy C siRNA (h) is recommended for the inhibition of Speedy C 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 Speedy C gene expression knockdown using RT-PCR Primer: Speedy C (h)-PR: sc-96329-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.