

SPIN1 siRNA (m): sc-153759

BACKGROUND

SPIN1 (spindlin 1), also known as SPIN or ovarian cancer-related protein (OCR), is a 262 amino acid nuclear protein suggested to play a role in regulation of the cell-cycle during the transition from gamete to embryo. A member of the SPIN/STSY family, SPIN1 localizes to interphase nucleus and mitotic chromosomes, and is modified by phosphorylation in a cell-cycle-dependent fashion. A meiotic spindle-binding protein, SPIN1 overexpression has been shown to cause defects in mitotic spindles, thereby resulting in chromosome instability and potential tumorigenesis. SPIN1 is highly expressed in ovarian cancer cells and is encoded by a gene located on human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Spin1 (mouse) mapping to 13 A5.

PRODUCT

SPIN1 siRNA (m) 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SPIN1 shRNA Plasmid (m): sc-153759-SH and SPIN1 shRNA (m) Lentiviral Particles: sc-153759-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 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

SPIN1 siRNA (m) is recommended for the inhibition of SPIN1 expression in mouse 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 SPIN1 gene expression knockdown using RT-PCR Primer: SPIN1 (m)-PR: sc-153759-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.