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SPIN2 siRNA (m): sc-153760

BACKGROUND

SPIN2 (spindlin family, member 2), also known as DXF34, SPIN2A, spindlin-2, is a 258 amino acid nuclear and cytoplasmic protein in the SPIN/STSY family that is thought to be involved in the regulation of cell cycle progression. SPIN2 is highly expressed in liver and kidney. The C-terminal end of SPIN2 contains a potential ribonucleotide-binding site and a tyrosine phosphorylation site. Mapping to a 100-kb region of human chromosome Xp11.21, the SPIN2 gene is one of three members of the DXF34 gene family. The gene that encodes SPIN2 contains two transcripts and is thought to be involved in the skin disorder, incontinentia pigmenti. The human X chromosome contains approximately 1,098 genes, of which 99 encode proteins expressed in testis and in various tumor cells. There is a high number of mendelian diseases that are documented for the X chromosome and there is also evidence for a major susceptibility locus for sex reversal/gonadal dysgenesis on the short arm of the X-chromosome (Xp11.21-11.23).

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CHROMOSOMAL LOCATION

Genetic locus: Spin2 (mouse) mapping to X F3.

PRODUCT

SPIN2 siRNA (m) 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 SPIN2 shRNA Plasmid (m): sc-153760-SH and SPIN2 shRNA (m) Lentiviral Particles: sc-153760-V as alternate gene silencing products.

For independent verification of SPIN2 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-153760A, sc-153760B and sc-153760C.

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

SPIN2 siRNA (m) is recommended for the inhibition of SPIN2 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 SPIN2 gene expression knockdown using RT-PCR Primer: SPIN2 (m)-PR: sc-153760-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.