

SP140 siRNA (h): sc-94369

BACKGROUND

SP140 (SP140 nuclear body protein), also known as LYSP100, LYSP100-A or LYSP100-B, is an 867 amino acid cytoplasmic and nuclear protein that is highly expressed in spleen and peripheral blood leukocytes. SP140 is a component of the nuclear body that may be involved in trafficking between the nucleus and the cytoplasm. SP140 is induced by interferons and contains a bromo domain, a HSR domain, a PHD-type zinc finger and a SAND domain. It is thought that SP140 may participate in the pathogenesis of acute promyelocytic leukemia and viral infection. SP140 is expressed as three isoforms produced by alternative splicing and are designated isoform LYSp100-A, isoform LYSp100-B and isoform SP140.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SP140 (human) mapping to 2q37.1.

PRODUCT

SP140 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SP140 shRNA Plasmid (h): sc-94369-SH and SP140 shRNA (h) Lentiviral Particles: sc-94369-V as alternate gene silencing products.

For independent verification of SP140 (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-94369A, sc-94369B and sc-94369C.

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

SP140 siRNA (h) is recommended for the inhibition of SP140 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 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 SP140 gene expression knockdown using RT-PCR Primer: SP140 (h)-PR: sc-94369-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.