

Spatial siRNA (m): sc-153727

BACKGROUND

Spatial, also known as stromal protein associated with thymii and lymph node, tbata (thymus, brain and testis associated), or titest, is a putative transcription factor implicated in T-cell development. Consisting of 393 amino acids, Spatial exists as multiple alternatively spliced isoforms whose expression may be developmentally regulated and display tissue specific function. Spatial isoform 1 and 2 (also designated Spatial ϵ and δ , respectively), are considered two "long" isoforms which are expressed in testis. During the early stages of spermatid development Spatial isoforms 1 and 2 localize to cytosol, and at the end stages they are found near the manchette and nascent flagellum. Spatial isoforms 3, 4 and 5 (also known as Spatial β , α and γ , respectively), are highly expressed in thymus and are considered the "short" isoforms. The gene encoding Spatial maps to murine chromosome 10 B4, which corresponds to human chromosome 10q22.1.

REFERENCES

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3. Irla, M., Puthier, D., Granjeaud, S., Saade, M., Victorero, G., Mattei, M.G. and Nguyen, C. 2004. Genomic organization and the tissue distribution of alternatively spliced isoforms of the mouse Spatial gene. *BMC Genomics* 5: 41.
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CHROMOSOMAL LOCATION

Genetic locus: Tbata (mouse) mapping to 10 B4.

PROTOCOLS

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

PRODUCT

Spatial 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 Spatial shRNA Plasmid (m): sc-153727-SH and Spatial shRNA (m) Lentiviral Particles: sc-153727-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

Spatial siRNA (m) is recommended for the inhibition of Spatial 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 Spatial gene expression knockdown using RT-PCR Primer: Spatial (m)-PR: sc-153727-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.