

SPACA5 siRNA (m): sc-153698

BACKGROUND

SPACA5 (sperm acrosome-associated protein 5), also known as lysozyme-like protein 5 or sperm-specific lysozyme-like protein X (SLLP-X), is a 150 amino acid secreted protein belonging to the glycosyl hydrolase 22 family. Acting as a component of the perinuclear theca and the acrosome, two structures present on the sperm head, SPACA5 may be a factor in sperm head defects. The gene encoding SPACA5 maps to human chromosome Xp11.23. Chromosome X consists of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia, and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently than females as males carry a single X chromosome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Spaca5 (mouse) mapping to X A1.3.

PRODUCT

SPACA5 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 SPACA5 shRNA Plasmid (m): sc-153698-SH and SPACA5 shRNA (m) Lentiviral Particles: sc-153698-V as alternate gene silencing products.

For independent verification of SPACA5 (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-153698A, sc-153698B and sc-153698C.

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

SPACA5 siRNA (m) is recommended for the inhibition of SPACA5 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 SPACA5 gene expression knockdown using RT-PCR Primer: SPACA5 (m)-PR: sc-153698-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.