SANTA CRUZ BIOTECHNOLOGY, INC.

ELSPBP1 siRNA (h): sc-97637

BACKGROUND

ELSPBP1 (epididymal sperm-binding protein 1), also known as epididymal secretory protein 12 (E12), HE12 or EDDM12, is a 223 amino acid member of the seminal plasma protein family. ELSPBP1 is a secreted protein that is detected in cauda epididymidal fluid and on sperm membrane. ELSPBP1 has phosphorylcholine-binding activity and has been shown to bind to spermatozoa upon ejaculation and is thought to play a role in sperm capacitation. N-glycosylated, ELSPBP1 contains four fibronectin type-II domains. The gene that encodes ELSPBP1 maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ELSPBP1 (human) mapping to 19q13.33.

PRODUCT

ELSPBP1 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ELSPBP1 shRNA Plasmid (h): sc-97637-SH and ELSPBP1 shRNA (h) Lentiviral Particles: sc-97637-V as alternate gene silencing products.

For independent verification of ELSPBP1 (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-97637A, sc-97637B and sc-97637C.

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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

ELSPBP1 siRNA (h) is recommended for the inhibition of ELSPBP1 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 µM in 66 µl. 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 ELSPBP1 gene expression knockdown using RT-PCR Primer: ELSPBP1 (h)-PR: sc-97637-PR (20 µl). 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.