SANTA CRUZ BIOTECHNOLOGY, INC.

TNP1 siRNA (m): sc-154544

BACKGROUND

TNP1 (transition protein 1), also known as TP1 or STP1 (spermatid nuclear transition protein 1), is a 55 amino acid nuclear protein that belongs to the nuclear transition protein family. Expressed specifically in the testis, TNP1 is a spermatid-specific protein that functions as a basic chromosomal transition protein during the conversion of nucleosomal chromatin to the compact, non-nucleosomal form found in sperm nuclei. During spermatogensis, TNP1, a product of the haploid genome, replaces histone and is subsequently replaced by protamines in mature sperm. Although TNP1 is present for only a short amount of time during sperm maturation, it is thought to play an essential role in male fertility.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Tnp1 (mouse) mapping to 1 C3.

PRODUCT

TNP1 siRNA (m) is a pool of 2 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 TNP1 shRNA Plasmid (m): sc-154544-SH and TNP1 shRNA (m) Lentiviral Particles: sc-154544-V as alternate gene silencing products.

For independent verification of TNP1 (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-154544A and sc-154544B.

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

TNP1 siRNA (m) is recommended for the inhibition of TNP1 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 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.