SANTA CRUZ BIOTECHNOLOGY, INC.

INSL6 siRNA (m): sc-60860

BACKGROUND

Insulin gene superfamily hormones modulate metabolism, cell growth, and tissue-specific functions. Insulin-like peptides (INSL proteins), also designated relaxin-like factors, are mostly secreted proteins that are expressed mainly in testis, placenta, uterus or prenatal tissues. Members of this superfamily are characterized by a signal peptide, a B chain, a connecting C chain, and an A chain. The deduced 213-amino acid human INSL6 protein, shares 45% sequence homology with the mouse INSL6 protein, and contains the characteristic B-C-A domain configuration of the Insulin/relaxin family proteins, including the 6 cysteines in the B and A domains. INSL6 expression is restricted to interstitial cells in testis, therefore implicating the protein in sperm development and fertilization. The INSL6 gene maps to chromosome 9p24.1.

REFERENCES

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3. Hsu, S.Y., Semyonov, J., Park, J.I. and Chang, C.L. 2005. Evolution of the signaling system in relaxin-family peptides. Ann. N.Y. Acad. Sci. 1041: 520-529.
4. Wilkinson, T.N., Speed, T.P., Tregear, G.W. and Bathgate, R.A. 2005. Evolution of the relaxin-like peptide family. BMC Evol. Biol. 5: 14.
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CHROMOSOMAL LOCATION

Genetic locus: Insl6 (mouse) mapping to 19 C1.

PRODUCT

INSL6 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see INSL6 shRNA Plasmid (m): sc-60860-SH and INSL6 shRNA (m) Lentiviral Particles: sc-60860-V as alternate gene silencing products.

For independent verification of INSL6 (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-60860A, sc-60860B and sc-60860C.

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

INSL6 siRNA (m) is recommended for the inhibition of INSL6 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor INSL6 gene expression knockdown using RT-PCR Primer: INSL6 (m)-PR: sc-60860-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.