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SANTA CRUZ BIOTECHNOLOGY, INC.

INSM2 siRNA (m): sc-146244

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Insulinoma-associated protein 2 (INSM2), also known as zinc finger protein IA-6, is a 566 amino acid nuclear protein. INSM2 is believed to act as a growth or tumor suppressor in certain neurons and in liver cells. INSM2 contains five zinc finger C_2H_2-type domains which bind nucleic acids. Zinc fingers are composed of 25-30 amino acid residues and have the ability to bind about five nucleotides. C_2H_2-type zinc fingers have two cysteines on one extremity of the domain, and two histidines on the other extremity. These four cysteines and histidines interact with one zinc atom, resulting in the finger-like conformation of the domain. It is believed that the C_2H_2-type zinc fingers require the binding of a zinc atom in order for the finger to bind DNA or RNA.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Insm2 (mouse) mapping to 12 C1.

PROTOCOLS

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

PRODUCT

INSM2 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 INSM2 shRNA Plasmid (m): sc-146244-SH and INSM2 shRNA (m) Lentiviral Particles: sc-146244-V as alternate gene silencing products.

For independent verification of INSM2 (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-146244A, sc-146244B and sc-146244C.

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

INSM2 siRNA (m) is recommended for the inhibition of INSM2 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 INSM2 gene expression knockdown using RT-PCR Primer: INSM2 (m)-PR: sc-146244-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.