SANTA CRUZ BIOTECHNOLOGY, INC.

D19Bwg1357e siRNA (m): sc-142796

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The Power to Question

BACKGROUND

KIAA0020, also known as XTP5 (HBV X-transactivated gene 5 protein), PUF6, PEN or HLA-HA8, is a 648 amino acid nuclear protein that contains six pumilio repeats and one PUM-H (pumilio homology) domain. The pumilio repeat is an imperfectly repeated 36 amino acid motif that is flanked by short N- and C-terminal regions which, together, comprise the PUM-H domain. Proteins that contain PUM-H domains usually exhibit sequence-specific RNA binding capabilities and often play a role in repressing the translation of select mRNAs. Expressed ubiquitously with highest expression in liver, kidney, lung, colon, ovary and testis, KIAA0020 contains an HA-8 (histocompatibility antigen-8) region that can be cleaved and exposed at the cell surface, where it may function as a minor histocompatibility antigen. Due to the presence of a PUM-H domain, KIAA0020 may be involved in the regulation of translation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: D19Bwg1357e (mouse) mapping to 19 C1.

PRODUCT

D19Bwg1357e 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 D19Bwg1357e shRNA Plasmid (m): sc-142796-SH and D19Bwg1357e shRNA (m) Lentiviral Particles: sc-142796-V as alternate gene silencing products.

For independent verification of D19Bwg1357e (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-142796A and sc-142796B.

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

D19Bwg1357e siRNA (m) is recommended for the inhibition of D19Bwg1357e 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 D19Bwg1357e gene expression knockdown using RT-PCR Primer: D19Bwg1357e (m)-PR: sc-142796-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.