SANTA CRUZ BIOTECHNOLOGY, INC.

INTS8 siRNA (m): sc-146256

BACKGROUND

RNA polymerase II (Pol II) is an enzyme that is composed of 12 subunits and is responsible for the transcription of protein-coding genes. Transcription initiation requires Pol II-mediated recruitment of transcription machinery to a target promoter, thereby allowing transcription to begin. The integrator complex is a multi-protein complex that associates with the C-terminal domain of Pol II and is involved in small nuclear RNA (snRNA) transcription and 3'-end processing. INTS8 (integrator complex subunit 8) is also known as INT8 or Kaonashi-1 (Kaonashi protein 1) and is a 995 amino acid protein that is expressed as two isoforms. INTS8 is a component of the integrator complex and is localized to the nucleus which is typical of proteins that contain TPR (tetratrico peptide repeat) repeats. INTS8 contains four TPR repeats, each of which is a 34 amino acid motif and has a helix-turn-helix shape which can aid proteins in a variety of functions, one of which is transcriptional regulation. Because INTS8 has TPR repeats, it may be involved in transcriptional regulation events concerning the integrator complex.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Ints8 (mouse) mapping to 4 A1.

PRODUCT

INTS8 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 INTS8 shRNA Plasmid (m): sc-146256-SH and INTS8 shRNA (m) Lentiviral Particles: sc-146256-V as alternate gene silencing products.

For independent verification of INTS8 (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-146256A, sc-146256B and sc-146256C.

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

INTS8 siRNA (m) is recommended for the inhibition of INTS8 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 INTS8 gene expression knockdown using RT-PCR Primer: INTS8 (m)-PR: sc-146256-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.