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# INTS5 siRNA (m): sc-146255

## 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 RNAs (snRNA) U1 and U2 transcription, specifically in their 3'-box-dependent processing. A component of the integrator complex, INTS5 (integrator complex subunit 5), also known as KIAA1698, is a 1,019 amino acid multi-pass membrane protein localized to the nucleus. The gene encoding INTS5 maps to human chromosome 11q12.3 and mouse chromosome 19 A.

## REFERENCES

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8. Egloff, S., Szczepaniak, S.A., Dienstbier, M., Taylor, A., Knight, S. and Murphy, S. 2010. The integrator complex recognizes a new double mark on the RNA polymerase II carboxyl-terminal domain. *J. Biol. Chem.* 285: 20564-20569.

## CHROMOSOMAL LOCATION

Genetic locus: Ints5 (mouse) mapping to 19 A.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## PRODUCT

INTS5 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see INTS5 shRNA Plasmid (m): sc-146255-SH and INTS5 shRNA (m) Lentiviral Particles: sc-146255-V as alternate gene silencing products.

For independent verification of INTS5 (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-146255A, sc-146255B and sc-146255C.

## 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

INTS5 siRNA (m) is recommended for the inhibition of INTS5 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  $\mu$ M in 66  $\mu$ l. 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 INTS5 gene expression knockdown using RT-PCR Primer: INTS5 (m)-PR: sc-146255-PR (20  $\mu$ l). 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.