



Rec8 siRNA (m): sc-152787

BACKGROUND

Cohesins are a group of conserved proteins that are responsible for cohesion between replicated sister chromatids during mitosis and meiosis and are implicated in double-strand break repair and meiotic recombination. The Rec8 subfamily is composed of meiosis-specific proteins involved in sister chromatid cohesion and homolog pairing during meiosis, and it localizes to approximately 100 foci per prophase nucleus. Rec8 is present in an unphosphorylated form early in meiotic prophase but is phosphorylated prior to meiosis I. Rec8 appears in the centromeres and adjacent chromosome arms during the pre-meiotic S phase. Centromeric Rec8 persists throughout meiosis I and disappears at anaphase of meiosis II.

REFERENCES

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2. Watanabe, Y. and Nurse, P. 1999. Cohesin Rec8 is required for reductional chromosome segregation at meiosis. *Nature* 400: 461-464.
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CHROMOSOMAL LOCATION

Genetic locus: Rec8 (mouse) mapping to 14 C3.

PRODUCT

Rec8 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Rec8 shRNA Plasmid (m): sc-152787-SH and Rec8 shRNA (m) Lentiviral Particles: sc-152787-V as alternate gene silencing products.

For independent verification of Rec8 (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-152787A, sc-152787B and sc-152787C.

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

APPLICATIONS

Rec8 siRNA (m) is recommended for the inhibition of Rec8 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 μ M in 66 μ 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 Rec8 gene expression knockdown using RT-PCR Primer: Rec8 (m)-PR: sc-152787-PR (20 μ 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.

PROTOCOLS

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