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SANTA CRUZ BIOTECHNOLOGY, INC.

SF3B14 siRNA (m): sc-153394

BACKGROUND

SAP 14 (spliceosome-associated protein, 14 kDa subunit), also known as P14, Ht006, CGI-110, HSPC175 or SF3B14a, is a 125 amino acid nuclear protein that is a component of the splicing factor 3b complex. Splicing factor 3b associates with both the U2 and U11/U12 small nuclear ribonucleoprotein complexes (U2 snRNP) of spliceosomes. Required for the splicing of pre-mRNA, SAP 14 enters the spliceosome and associates with the pre-mRNA branch site facilitating the interaction of snRNP with the branch sites of U2 and U12 of the 17S U2 and the 18S U11/U12 snRNP complex. SAP 14 contains a highly conserved RRM (RNA recognition motif) domain and interacts with SAP 155. SAP 14 is encoded by a gene located on human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome.

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CHROMOSOMAL LOCATION

Genetic locus: 0610009D07Rik (mouse) mapping to 12 A1.1.

PRODUCT

SF3B14 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 SF3B14 shRNA Plasmid (m): sc-153394-SH and SF3B14 shRNA (m) Lentiviral Particles: sc-153394-V as alternate gene silencing products.

For independent verification of SF3B14 (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-153394A, sc-153394B and sc-153394C.

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

SF3B14 siRNA (m) is recommended for the inhibition of SF3B14 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 SF3B14 gene expression knockdown using RT-PCR Primer: SF3B14 (m)-PR: sc-153394-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.