SANTA CRUZ BIOTECHNOLOGY, INC.

hnRNP UL2 siRNA (m): sc-146065

BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to mRNA transcription and pre-mRNA processing, as well as mature mRNA transport to the cytoplasm and translation. They also bind heterogeneous nuclear RNA (hnRNA), which are the transcripts produced by RNA polymerase II. There are approximately 20 known hnRNP proteins, and their complexes are the major constituents of the spliceosome. The majority of hnRNP protein components are localized to the nucleus, however some shuttle between the nucleus and the cytoplasm. hnRNP UL2 (heterogeneous nuclear ribonucleoprotein U-like protein 2), also known as SAF-A2 is a 747 amino acid protein that contains one B30.2/SPRY domain and a SAP domain. Localizing to the nucleus, hnRNP UL2 functions in the binding and retention of MLF1 in the nucleus.

REFERENCES

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6. Blackford, A.N., Bruton, R.K., Dirlik, O., Stewart, G.S., Taylor, A.M., Dobner, T., Grand, R.J. and Turnell, A.S. 2008. A role for E1B-AP5 in ATR signaling pathways during adenovirus infection. J. Virol. 82: 7640-7652.

CHROMOSOMAL LOCATION

Genetic locus: Hnrnpul2 (mouse) mapping to 19 A.

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.

PRODUCT

hnRNP UL2 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 hnRNP UL2 shRNA Plasmid (m): sc-146065-SH and hnRNP UL2 shRNA (m) Lentiviral Particles: sc-146065-V as alternate gene silencing products.

For independent verification of hnRNP UL2 (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-146065A, sc-146065B and sc-146065C.

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

hnRNP UL2 siRNA (m) is recommended for the inhibition of hnRNP UL2 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 hnRNP UL2 gene expression knockdown using RT-PCR Primer: hnRNP UL2 (m)-PR: sc-146065-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.