SANTA CRUZ BIOTECHNOLOGY, INC.

DRIM siRNA (h): sc-95911

BACKGROUND

DRIM (down-regulated in metastasis protein), also known as NNP73 (novel nucleolar protein 73), UTP20 or protein Key-1A6, is a 2,785 amino acid protein belonging to the UTP20 family. Localized to the nucleus, DRIM contains two HEAT repeats and interacts with Fibrillarin and KIAA0649. DRIM is involved in 18S pre-rRNA processing and associates with U3 snoRNA. DRIM is expressed in colon, brain, heart, ovary, fetal liver, testis, small intestine, spleen, thymus, skeletal muscle, placenta, pancreas and prostate. The gene that encodes DRIM maps to human chromosome 12, which encodes over 1,100 genes within 132 million bases, making up about 4.5% of the human genome. Several skeletal deformities are linked to chromosome 12 including hypochondrogenesis, achondrogenesis and Kniest dysplasia. Trisomy 12p leads to facial development defects, seizure disorders and a host of other symptoms varying in severity depending on the extent of mosaicism and is most severe in cases of complete trisomy.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: UTP20 (human) mapping to 12q23.2.

PRODUCT

DRIM siRNA (h) is a target-specific 19-25 nt siRNA 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 DRIM shRNA Plasmid (h): sc-95911-SH and DRIM shRNA (h) Lentiviral Particles: sc-95911-V as alternate gene silencing products.

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

DRIM siRNA (h) is recommended for the inhibition of DRIM expression in human 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 DRIM gene expression knockdown using RT-PCR Primer: DRIM (h)-PR: sc-95911-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.