SANTA CRUZ BIOTECHNOLOGY, INC.

TRAG-3 siRNA (h): sc-106632

BACKGROUND

TRAG-3, also known as CSAG2 (CSAG family, member 2), is a 127 amino acid protein that is expressed at low levels in kidney tissue and is also present in various carcinomas, including melanomas and prostate cancer. Existing as multiple alternatively spliced isoforms, TRAG-3 functions as a drug-resistance related protein that is thought to be linked to malignancy and is associated with a resistance to chemotherapy, indicating a strong role in tumor development and survival. The gene encoding TRAG-3 maps to human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes. In conjunction with chromosome Y, chromosome X is responsible for sex determination. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia and Duchenne muscular dystrophy.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CSAG2 (human) mapping to Xq28.

PRODUCT

TRAG-3 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 TRAG-3 shRNA Plasmid (h): sc-106632-SH and TRAG-3 shRNA (h) Lentiviral Particles: sc-106632-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

TRAG-3 siRNA (h) is recommended for the inhibition of TRAG-3 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 TRAG-3 gene expression knockdown using RT-PCR Primer: TRAG-3 (h)-PR: sc-106632-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.

PROTOCOLS

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