SANTA CRUZ BIOTECHNOLOGY, INC.

BJ-TSA-9 siRNA (h): sc-77619

BACKGROUND

Lung cancer is defined as the malignant metamorphosis and expansion of lung tissue. The most deadly of all cancers, lung carcinoma is responsible for millions deaths annually. Initially an illness predominantly affecting males, incidence in women continues to increase, most likely a result of the emerging ratio of female to male smokers. BJ-TSA-9, also known as FAM83A or tumor-specific gene expressed in prostate protein, is a 434 amino acid protein that belongs to the FAM83 family. Existing as three alternatively spliced isoforms, BJ-TSA-9 is highly expressed in lung cancer tissues and is considered a novel tumor specific gene and a critical biomarker for lung cancer diagnosis. The gene encoding BJ-TSA-9 is located on human chromosome 8, which is made up of nearly 146 million bases and encodes about 800 genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FAM83A (human) mapping to 8q24.13.

PRODUCT

BJ-TSA-9 siRNA (h) is a pool of 2 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 BJ-TSA-9 shRNA Plasmid (h): sc-77619-SH and BJ-TSA-9 shRNA (h) Lentiviral Particles: sc-77619-V as alternate gene silencing products.

For independent verification of BJ-TSA-9 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-77619A and sc-77619B.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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

BJ-TSA-9 siRNA (h) is recommended for the inhibition of BJ-TSA-9 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 BJ-TSA-9 gene expression knockdown using RT-PCR Primer: BJ-TSA-9 (h)-PR: sc-77619-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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