SANTA CRUZ BIOTECHNOLOGY, INC.

SAGE1 siRNA (h): sc-91094

BACKGROUND

Cancer/testis (CT) antigens are protein antigens with normal expression restricted to adult testicular germ cells, and yet are aberrantly activated and expressed in a proportion of various types of human cancer. More than 100 CT antigen genes have been reported, with approximately 30 being members of multigene families on the X chromosome, so-called CT-X genes. Most CT-X genes are expressed at the spermatogonia stage of spermatogenesis, and their functions are mostly unknown. SAGE1 (sarcoma antigen 1) is a 904 amino acid protein that contains 15 repeated motifs of 47 amino acids. SAGE1 is expressed mainly in bladder, lung, head and neck carcinomas, but not expressed in normal tissues except for testis. The SAGE1 gene maps to human chromosome Xq26.3, near the MAGEA genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SAGE1 (human) mapping to Xq26.3.

PRODUCT

SAGE1 siRNA (h) 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 SAGE1 shRNA Plasmid (h): sc-91094-SH and SAGE1 shRNA (h) Lentiviral Particles: sc-91094-V as alternate gene silencing products.

For independent verification of SAGE1 (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-91094A, sc-91094B and sc-91094C.

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

SAGE1 siRNA (h) is recommended for the inhibition of SAGE1 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 SAGE1 gene expression knockdown using RT-PCR Primer: SAGE1 (h)-PR: sc-91094-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.