SANTA CRUZ BIOTECHNOLOGY, INC.

TDE1 siRNA (h): sc-76638

BACKGROUND

TDE1, tumor differentially expressed protein 1, is a multi-pass membrane protein also known as serine incorporator 3. Also found on the membranes of the Golgi apparatus within cells, TDE1 is highly expressed in neuronal populations but is also found in thymus, kidney, liver and testis. Expression levels of TDE1 in tumors can be as much as tenfold the amount found in normal tissue of the same type. This increased expression implicates TDE1 as being involved in the cellular transformation from normal to malignant tissue. It is believed TDE1 contributes to oncogenesis by partially protecting cells from serum starvation and etoposide-induced apoptosis. The mechanism through which TDE1 protects cells is poorly understood, but may involve aberrant methylation of TDE1 complexes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SERINC3 (human) mapping to 20q13.12.

PRODUCT

TDE1 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 TDE1 shRNA Plasmid (h): sc-76638-SH and TDE1 shRNA (h) Lentiviral Particles: sc-76638-V as alternate gene silencing products.

For independent verification of TDE1 (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-76638A, sc-76638B and sc-76638C.

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

TDE1 siRNA (h) is recommended for the inhibition of TDE1 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 TDE1 gene expression knockdown using RT-PCR Primer: TDE1 (h)-PR: sc-76638-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.