SANTA CRUZ BIOTECHNOLOGY, INC.

LUZP4 siRNA (h): sc-91048

BACKGROUND

LUZP4 (leucine zipper protein 4), also known as cancer/testis antigen 28 and tumor antigen HOM-TES-85, is a 313 amino acid protein that is specifically expressed in normal testis. Localized to the nucleus, LUZP4 forms a distinctive speckled pattern of nuclear dots which represent loci of transcriptional activity, therefore suggesting that LUZP4 is involved in transcriptional processes. The LUZP4 gene is frequently activated in a variety of neoplasms, such as ovarian cancer, lung cancer, gliomas and melanomas. It has been suggested that aberrant expression of LUZP4 may activate transcriptional or post-transcriptional processes leading to tumorigenesis.

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: LUZP4 (human) mapping to Xq23.

PRODUCT

LUZP4 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 LUZP4 shRNA Plasmid (h): sc-91048-SH and LUZP4 shRNA (h) Lentiviral Particles: sc-91048-V as alternate gene silencing products.

For independent verification of LUZP4 (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-91048A, sc-91048B and sc-91048C.

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

LUZP4 siRNA (h) is recommended for the inhibition of LUZP4 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 LUZP4 gene expression knockdown using RT-PCR Primer: LUZP4 (h)-PR: sc-91048-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.