



se57-1 siRNA (h): sc-76463

BACKGROUND

se57-1 (coiled-coil domain-containing protein 68), also known as CTCL tumor antigen se57-1, is a 335 amino acid protein expressed in cutaneous T-cell lymphoma (CTCL), bone marrow, colon, small intestine, spleen, testis and trachea tissues. CTCL is a cancer of the immune system associated with mutation of the T cells. Malignant T cells form lesions on the surface of the skin. se57-1 contains one coiled coil domain and is encoded by the CCDC68 gene mapping to human chromosome 18. Chromosome 18 houses over 300 protein-coding genes and contains nearly 76 million bases. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include Trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

REFERENCES

1. Eichmüller, S., Usener, D., Dummer, R., Stein, A., Thiel, D. and Schadendorf, D. 2001. Serological detection of cutaneous T-cell lymphoma-associated antigens. *Proc. Natl. Acad. Sci. USA* 98: 629-634.
2. Gerhardt, A., Usener, D., Keese, M., Sturm, J., Schadendorf, D. and Eichmüller, S. 2004. Tissue expression and sero-reactivity of tumor-specific antigens in colorectal cancer. *Cancer Lett.* 208: 197-206.
3. Nicot, C. 2005. Current views in HTLV-I-associated adult T-cell leukemia/lymphoma. *Am. J. Hematol.* 78: 232-239.
4. Grosso, S., Pucci, L., Di Bartolo, R.M., Gobbi, G., Bartalini, G., Anichini, C., Scarinci, R., Balestri, M., Farnetani, M.A., Cioni, M., Morgese, G. and Balestri, P. 2005. Chromosome 18 aberrations and epilepsy: a review. *Am. J. Med. Genet. A* 134A: 88-94.
5. Nusbaum, C., Zody, M.C., Borowsky, M.L., Kamal, M., Kodira, C.D., Taylor, T.D., Whittaker, C.A., Chang, J.L., Cuomo, C.A., Dewar, K., FitzGerald, M.G., Yang, X., Abouelleil, A., Allen, N.R., Anderson, S., Bloom, T., et al. 2005. DNA sequence and analysis of human chromosome 18. *Nature* 437: 551-555.

CHROMOSOMAL LOCATION

Genetic locus: CCDC68 (human) mapping to 18q21.2.

PRODUCT

se57-1 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see se57-1 shRNA Plasmid (h): sc-76463-SH and se57-1 shRNA (h) Lentiviral Particles: sc-76463-V as alternate gene silencing products.

For independent verification of se57-1 (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-76463A, sc-76463B and sc-76463C.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support 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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

se57-1 siRNA (h) is recommended for the inhibition of se57-1 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 μ M in 66 μ l. 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 se57-1 gene expression knockdown using RT-PCR Primer: se57-1 (h)-PR: sc-76463-PR (20 μ l). 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.