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SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

SANTA CRUZ BIOTECHNOLOGY, INC.

TOX3 siRNA (m): sc-154563

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

HMG box DNA binding domains are involved in the bending and unwinding of DNA, as well as alteration of chromatin structure. TOX3 (TOX high mobility group box family member 3), also known as CAGF9 or TNRC9, is a 576 amino acid nuclear protein that contains one HMG box DNA-binding domain. Due to CAG repeats in its coding region, TOX3 has a glutamine-rich C-terminus. Expressed in brain, TOX3 interacts with MSG1 and is associated with an elevated risk of breast cancer. The gene encoding TOX3 maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

1. Baraitser, M. and Preece, M.A. 1983. The Rubinstein-Taybi syndrome: occurrence in two sets of identical twins. Clin. Genet. 23: 318-320.
2. Margolis, R.L., et al. 1997. cDNAs with long CAG trinucleotide repeats from human brain. Hum. Genet. 100: 114-122.
3. Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. Nat. Genet. 26: 370-374.
4. O'Flaherty, E. and Kaye, J. 2003. TOX defines a conserved subfamily of HMG-box proteins. BMC Genomics 4: 13.
5. Smid, M., et al. 2006. Genes associated with breast cancer metastatic to bone. J. Clin. Oncol. 24: 2261-2267.
6. Stacey, S.N., et al. 2007. Common variants on chromosomes 2q35 and 16q12 confer susceptibility to estrogen receptor-positive breast cancer. Nat. Genet. 39: 865-869.
7. Antoniou, A.C., et al. 2008. Common breast cancer-predisposition alleles are associated with breast cancer risk in BRCA1 and BRCA2 mutation carriers. Am. J. Hum. Genet. 82: 937-948.
8. Dittmer, S., et al. 2011. TOX3 is a neuronal survival factor that induces transcription depending on the presence of CITED1 or phosphorylated CREB in the transcriptionally active complex. J. Cell Sci. 124: 252-260.
9. Fletcher, O., et al. 2011. Novel breast cancer susceptibility locus at 9q31.2: results of a genome-wide association study. J. Natl. Cancer Inst. 103: 425-435.

CHROMOSOMAL LOCATION

Genetic locus: Tox3 (mouse) mapping to 8 C4.

PROTOCOLS

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

PRODUCT

TOX3 siRNA (m) 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 TOX3 shRNA Plasmid (m): sc-154563-SH and TOX3 shRNA (m) Lentiviral Particles: sc-154563-V as alternate gene silencing products.

For independent verification of TOX3 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-154563A, sc-154563B and sc-154563C.

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

TOX3 siRNA (m) is recommended for the inhibition of TOX3 expression in mouse 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 TOX3 gene expression knockdown using RT-PCR Primer: TOX3 (m)-PR: sc-154563-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.