



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

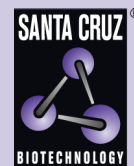
T. +43(0)1 489 3961-0

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

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 



Pot1b siRNA (m): sc-152393

BACKGROUND

Telomeres, which are G-rich repetitive sequences at the ends of linear eukaryotic chromosomes, are DNA-protein structures that protect the ends of linear chromosomes and help maintain genomic stability and cell phenotype. Telomere maintenance involves the cooperation of several telomeric factors, including telomerase, TRF1, TRF2, RAP1, TIN2, Tankyrase, PINX1 and POT1. Pot1b (protection of telomeres 1B) is a 623 amino acid murine protein that may be involved in telomere maintenance. Pot1b is encoded by a gene located on mouse chromosome 17.

REFERENCES

- Counter, C.M., et al. 1992. Telomere shortening associated with chromosome instability is arrested in immortal cells which express telomerase activity. *EMBO J.* 11: 1921-1929.
- Kim, N.W., et al. 1994. Specific association of human telomerase activity with immortal cells and cancer. *Science* 266: 2011-2015.
- Greider, C.W. 1996. Telomere length regulation. *Annu. Rev. Biochem.* 65: 337-365.
- Harrington, L., et al. 1997. A mammalian telomerase-associated protein. *Science* 275: 973-977.
- Nakayama, J., et al. 1997. TLP1: a gene encoding a protein component of mammalian telomerase is a novel member of WD repeats family. *Cell.* 88: 875-884.
- Nakamura, T.M., et al. 1997. Telomerase catalytic subunit homologs from fission yeast and human. *Science* 277: 955-959.
- Colgin, L.M., et al. 2003. Human POT1 facilitates telomere elongation by telomerase. *Curr. Biol.* 13: 942-946.
- Loayza, D. and De Lange, T. 2003. POT1 as a terminal transducer of TRF1 telomere length control. *Nature* 423: 1013-1018.
- Kelleher, C., et al. 2005. Human protection of telomeres 1 (POT1) is a negative regulator of telomerase activity *in vitro*. *Mol. Cell. Biol.* 25: 808-818.

CHROMOSOMAL LOCATION

Genetic locus: Pot1b (mouse) mapping to 17 C.

PRODUCT

Pot1b 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Pot1b shRNA Plasmid (m): sc-152393-SH and Pot1b shRNA (m) Lentiviral Particles: sc-152393-V as alternate gene silencing products.

For independent verification of Pot1b (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-152393A, sc-152393B and sc-152393C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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

Pot1b siRNA (m) is recommended for the inhibition of Pot1b 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 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 Pot1b gene expression knockdown using RT-PCR Primer: Pot1b (m)-PR: sc-152393-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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