



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) 

PICT-1 shRNA (m) Lentiviral Particles: sc-45699-V

BACKGROUND

The tumor suppressor PTEN plays an essential role in regulating signaling pathways involved in cell growth and apoptosis and is inactivated in a wide variety of tumors. Protein interacting with PTEN carboxyl terminus 1 (PICT-1), also designated p60 or glioma tumor suppressor candidate region gene 2 protein, binds to the C-terminus of PTEN and regulates its turnover. Five Ser/Thr residues within the C-terminal segment of PTEN, including Ser 380, are phosphorylated upon binding of PTEN to PICT-1 and may contribute to the stabilization of PTEN. PICT-1 is localized to the nucleus and/or nucleolus and is highly expressed in pancreas and heart, but can also be detected in liver, skeletal muscle, placenta and kidney. PICT-1 also interacts with herpes simplex virus 1 regulatory proteins ICP22 and ICP0. The tumor suppressor GLTSCR2 gene, which encodes PICT-1, is located in a 150 kb minimal common deletion region for human gliomas, especially oligodendrogliomas, and maps to human chromosome 19q13.3.

REFERENCES

1. Bruni, R., et al. 1999. A novel cellular protein, p60, interacting with both herpes simplex virus 1 regulatory proteins ICP22 and ICP0 is modified in a cell-type-specific manner and is recruited to the nucleus after infection. *J. Virol.* 73: 3810-3817.
2. Smith, J.S., et al. 2000. A transcript map of the chromosome 19q-arm glioma tumor suppressor region. *Genomics* 64: 44-50.
3. Okahara, F., et al. 2004. Regulation of PTEN phosphorylation and stability by a tumor suppressor candidate protein. *J. Biol. Chem.* 279: 45300-45303.
4. Yang, P., et al. 2005. Polymorphisms in GLTSCR1 and ERCC2 are associated with the development of oligodendrogliomas. *Cancer* 103: 2363-2372.

CHROMOSOMAL LOCATION

Genetic locus: Gltsr2 (mouse) mapping to 7 A2.

PRODUCT

PICT-1 shRNA (m) Lentiviral Particles is a pool of concentrated, transduction-ready viral particles containing 3 target-specific constructs that encode 19-25 nt (plus hairpin) shRNA designed to knock down gene expression. Each vial contains 200 μ l frozen stock containing 1.0×10^6 infectious units of virus (IFU) in Dulbecco's Modified Eagle's Medium with 25 mM HEPES pH 7.3. Suitable for 10-20 transductions. Also see PICT-1 siRNA (m): sc-45699 and PICT-1 shRNA Plasmid (m): sc-45699-SH as alternate gene silencing products.

STORAGE

Store lentiviral particles at -80°C . Stable for at least one year from the date of shipment. Once thawed, particles can be stored at 4°C for up to one week. Avoid repeated freeze thaw cycles.

PROTOCOLS

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

APPLICATIONS

PICT-1 shRNA (m) Lentiviral Particles is recommended for the inhibition of PICT-1 expression in mouse cells.

SUPPORT REAGENTS

Control shRNA Lentiviral Particles: sc-108080. Available as 200 μ l frozen viral stock containing 1.0×10^6 infectious units of virus (IFU); contains an shRNA construct encoding a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA.

GENE EXPRESSION MONITORING

PICT-1 (C-20): sc-46615 is recommended as a control antibody for monitoring of PICT-1 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor PICT-1 gene expression knockdown using RT-PCR Primer: PICT-1 (m)-PR: sc-45699-PR (20 μ l). Annealing temperature for the primers should be $55-60^\circ\text{C}$ and the extension temperature should be $68-72^\circ\text{C}$.

BIOSAFETY

Lentiviral particles can be employed in standard Biosafety Level 2 tissue culture facilities (and should be treated with the same level of caution as with any other potentially infectious reagent). Lentiviral particles are replication-incompetent and are designed to self-inactivate after transduction and integration of shRNA constructs into genomic DNA of target cells.

RESEARCH USE

The purchase of this product conveys to the buyer the nontransferable right to use the purchased amount of the product and all replicates and derivatives for research purposes conducted by the buyer in his laboratory only (whether the buyer is an academic or for-profit entity). The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party, or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes.