

# Produktinformation



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# WTIP siRNA (m): sc-155365



The Power to Question

#### **BACKGROUND**

Wilms' tumor (WT) is an embryonal malignancy of the kidney that affects 1 in 10,000 infants and is observed in both sporadic and inherited forms. The Wilms' tumor locus has been mapped at chromosome 11p13 as a tumor suppressor gene which encodes a DNA binding protein with four zinc fingers and a glutamine-proline rich amino-terminus. WTIP (Wilms tumor 1 interacting protein) is a 654 amino acid LIM domain protein that belongs to the zyxin/ajuba family, interacts with WT1 (Wilms tumor 1) and is thought to play a role in slit diaphragm protein assembly. Acting as a transcription regulator, WTIP shuttles between nucleus and adhesion structures following podocyte injury to repress WT1-dependent transcription regulation. WTIP contains three LIM zinc-binding domains and is encoded by a gene that maps to human chromosome 19q13.11.

#### **REFERENCES**

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- 4. Yang, L., et al. 2007. A tumor suppressor and oncogene: the WT1 story. Leukemia 21: 868-876.
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#### CHROMOSOMAL LOCATION

Genetic locus: Wtip (mouse) mapping to 7 B1.

#### **PRODUCT**

WTIP 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see WTIP shRNA Plasmid (m): sc-155365-SH and WTIP shRNA (m) Lentiviral Particles: sc-155365-V as alternate gene silencing products.

For independent verification of WTIP (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-155365A, sc-155365B and sc-155365C.

#### STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20 $^{\circ}$  C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20 $^{\circ}$  C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330  $\mu$ l of the RNAse-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNAse-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

#### **APPLICATIONS**

WTIP siRNA (m) is recommended for the inhibition of WTIP 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 WTIP gene expression knockdown using RT-PCR Primer: WTIP (m)-PR: sc-155365-PR (20  $\mu$ 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.

#### **PROTOCOLS**

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

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