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

SANTA CRUZ BIOTECHNOLOGY, INC.

WDR6 siRNA (m): sc-155301

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

WD-repeats are motifs that are found in a variety of proteins and are characterized by a conserved core of 40-60 amino acids, which commonly form a tertiary propeller structure. While proteins that contain WD-repeats participate in a wide range of cellular functions, they are generally involved in regulatory mechanisms involving signal transduction, apoptosis, transcriptional regulation, cell cycle control. WD repeats serve as sites for protein-protein interaction and some seem to mediate the assembly of protein complexes. WDR6 (WD repeat-containing protein 6) is a 1,121 amino acid protein that contains 11 WD repeats, which are clustered into two distinct groups separated by a transmembrane domain. Displaying high expression in the hypothalamus, WDR6 levels appear to decrease with caloric restriction. Through involvement with the Insulin/IGF-I signaling pathway, WDR6 may play a role in feeding behavior regulation and longevity in the brain.

REFERENCES

1. Neer, E.J., Schmidt, C.J., Nambudripad, R. and Smith, T.F. 1994. The ancient regulatory-protein family of WD-repeat proteins. Nature 371: 297-300.
2. Garcia-Higuera, I., Fenoglio, J., Li, Y., Lewis, C., Panchenko, M.P., Reiner, O., Smith, T.F. and Neer, E.J. 1996. Folding of proteins with WD-repeats: comparison of six members of the WD-repeat superfamily to the G protein β subunit. Biochemistry 35: 13985-13994.
3. Smith, T.F., Gaitatzes, C., Saxena, K. and Neer, E.J. 1999. The WD repeat: a common architecture for diverse functions. Trends Biochem. Sci. 24: 181-185.
4. Yu, L., Gaitatzes, C., Neer, E. and Smith, T.F. 2000. Thirty-plus functional families from a single motif. Protein Sci. 9: 2470-2476.
5. Li, D., Burch, P., Gonzalez, O., Kashork, C.D., Shaffer, L.G., Bachinski, L.L. and Roberts, R. 2000. Molecular cloning, expression analysis, and chromosome mapping of WDR6, a novel human WD-repeat gene. Biochem. Biophys. Res. Commun. 274: 117-123.
6. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 606031. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
7. Xie, X., Wang, Z. and Chen, Y. 2007. Association of LKB1 with a WD-repeat protein WDR6 is implicated in cell growth arrest and $p27^{Kip1}$ induction. Mol. Cell. Biochem. 301: 115-122.
8. Chiba, T., Inoue, D., Mizuno, A., Komatsu, T., Fujita, S., Kubota, H., Luisa Tagliaro, M., Park, S., Trindade, L.S., Hayashida, T., Hayashi, H., Yamaza, H., Higami, Y. and Shimokawa, I. 2009. Identification and characterization of an Insulin receptor substrate 4-interacting protein in rat brain: implications for longevity. Neurobiol. Aging 30: 474-482.

CHROMOSOMAL LOCATION

Genetic locus: Wdr6 (mouse) mapping to 9 F2.

RESEARCH USE

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

PRODUCT

WDR6 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 WDR6 shRNA Plasmid (m): sc-155301-SH and WDR6 shRNA (m) Lentiviral Particles: sc-155301-V as alternate gene silencing products.

For independent verification of WDR6 (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-155301A, sc-155301B and sc-155301C.

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

WDR6 siRNA (m) is recommended for the inhibition of WDR6 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 WDR6 gene expression knockdown using RT-PCR Primer: WDR6 (m)-PR: sc-155301-PR (20 µl). 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.