



WDR40A siRNA (m): sc-155282

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 that 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 concerning chromatin assembly, cell cycle control, signal transduction, RNA processing, apoptosis and vesicular trafficking. WDR40A (WD-repeat-containing protein 40A), also known as DDB1- CUL4-associated factor 12, is a 453 amino acid cytoplasmic protein that contains four WD-repeats. WDR40A is highly expressed in some cancer cell lines, lung cancer tissues and normal testis. A probable substrate receptor for CUL4-DDB1 E3 ubiquitin-protein ligase complex, WDR40A is suggested to interact with DDB1. WDR40A is encoded by a gene mapping to human chromosome 9p13.3. Human chromosome 9 houses over 900 genes and comprises nearly 4% of the human genome.

REFERENCES

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3. Kasinrerk, W., et al. 1992. Human leukocyte activation antigen M6, a member of the Ig superfamily, is the species homologue of rat OX-47, mouse basigin, and chicken HT7 molecule. J. Immunol. 149: 847-854.
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8. Ochrietor, J.D., et al. 2003. Retina-specific expression of 5A11/Basigin-2, a member of the immunoglobulin gene superfamily. Invest. Ophthalmol. Vis. Sci. 44: 4086-4096.
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CHROMOSOMAL LOCATION

Genetic locus: Dcaf12 (mouse) mapping to 4 A5.

RESEARCH USE

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

PRODUCT

WDR40A 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 WDR40A shRNA Plasmid (m): sc-155282-SH and WDR40A shRNA (m) Lentiviral Particles: sc-155282-V as alternate gene silencing products.

For independent verification of WDR40A (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-155282A, sc-155282B and sc-155282C.

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

WDR40A siRNA (m) is recommended for the inhibition of WDR40A 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 WDR40A gene expression knockdown using RT-PCR Primer: WDR40A (m)-PR: sc-155282-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.