

WSCD2 siRNA (m): sc-155364

BACKGROUND

WSC domain-containing protein 2 (WSCD2) is a 565 amino acid, single-pass membrane protein that contains two WSC domains. The WSC domain is named after the yeast WSC1-WSC4 (cell wall integrity and stress response components 1-4) proteins, which each contain a WSC domain, and is a putative carbohydrate binding domain that spans about 90 amino acids. Containing eight conserved cysteine residues, which are predicted to form disulfide bridges, WSC domains are often found with other domains, such as LDL-receptor class A, PKD and C-type lectin. Two isoforms of WSCD2 exist as a result of alternative splicing events.

REFERENCES

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3. Ketela, T., Green, R. and Bussey, H. 1999. *Saccharomyces cerevisiae* mid2p is a potential cell wall stress sensor and upstream activator of the PKC1-MPK1 cell integrity pathway. *J. Bacteriol.* 181: 3330-3340.
4. Nakamura, T., Aoki, S., Kitajima, K., Takahashi, T., Matsumoto, K. and Nakamura, T. 2001. Molecular cloning and characterization of Kremen, a novel kringle-containing transmembrane protein. *Biochim. Biophys. Acta* 1518: 63-72.
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CHROMOSOMAL LOCATION

Genetic locus: Wscd2 (mouse) mapping to 5 F.

PRODUCT

WSCD2 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 WSCD2 shRNA Plasmid (m): sc-155364-SH and WSCD2 shRNA (m) Lentiviral Particles: sc-155364-V as alternate gene silencing products.

For independent verification of WSCD2 (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-155364A, sc-155364B and sc-155364C.

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

WSCD2 siRNA (m) is recommended for the inhibition of WSCD2 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 WSCD2 gene expression knockdown using RT-PCR Primer: WSCD2 (m)-PR: sc-155364-PR (20 μ 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.