

VWA5A siRNA (m): sc-149010

BACKGROUND

VWA5A (von Willebrand factor A domain containing 5A), also known as BCSC-1 (breast cancer suppressor candidate 1) or LOH11CR2A (loss of heterozygosity 11 chromosomal region 2 gene A protein), is a 786 amino acid protein containing one VIT domain and one VWFA domain. VWA5A is expressed at low levels in various tissues, with no expression found in 80% of tumor cell lines. Likely acting as a tumor suppressor gene, deletion of VWA5A leads to loss of heterozygosity (LOH) in breast and ovarian tumors, and may have an important role as a potential gene therapy target. Abnormal expression of VWA5A may lead to an increase in adhesion of CNE-2L2 cells associated with an increase in expression of E-cadherin, α -catenin, and p53, resulting in a decrease of malignant activity in cells with ectopic expression of VWA5A. Existing as four alternatively spliced isoforms, the gene encoding VWA5A maps to human chromosome 11q24.2.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Vwa5a (mouse) mapping to 9 A5.1.

PRODUCT

VWA5A 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 VWA5A shRNA Plasmid (m): sc-149010-SH and VWA5A shRNA (m) Lentiviral Particles: sc-149010-V as alternate gene silencing products.

For independent verification of VWA5A (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-149010A, sc-149010B and sc-149010C.

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

VWA5A siRNA (m) is recommended for the inhibition of VWA5A 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 VWA5A gene expression knockdown using RT-PCR Primer: VWA5A (m)-PR: sc-149010-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.