SANTA CRUZ BIOTECHNOLOGY, INC.

ZCWCC1 siRNA (h): sc-63239

BACKGROUND

The CW domain is a structural module found in many vertebrate, parasitic and plant proteins. It consists of a mononuclear four-cysteine zinc-finger domain that plays a role in DNA binding, chromatin methylation and early embryonic development. ZCWCC1 (zinc finger CW-type coiled-coil domain protein 1), also known as MORC2 (MORC family CW-type zinc finger protein 2) or ZCW3, is a 1,032 amino acid protein that contains one CW-type zinc finger domain. ZCWCC1 is located on chromosome 22 and is ubiquitously expressed with highest expression in pancreas, smooth muscle and testis. Expression of ZCWCC1 is upregulated in hypoxia, a pathological condition characterized by an inadequate supply of oxygen in the blood.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MORC2 (human) mapping to 22q12.2.

PRODUCT

ZCWCC1 siRNA (h) 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 ZCWCC1 shRNA Plasmid (h): sc-63239-SH and ZCWCC1 shRNA (h) Lentiviral Particles: sc-63239-V as alternate gene silencing products.

For independent verification of ZCWCC1 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-63239A, sc-63239B and sc-63239C.

RESEARCH USE

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

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

ZCWCC1 siRNA (h) is recommended for the inhibition of ZCWCC1 expression in human 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 ZCWCC1 gene expression knockdown using RT-PCR Primer: ZCWCC1 (h)-PR: sc-63239-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.