SANTA CRUZ BIOTECHNOLOGY, INC.

ZXDC siRNA (h): sc-78259

BACKGROUND

Zinc finger X-linked duplicated family member C (ZXDC) is an 858 amino acid protein belonging to the ZDX family. Localized to the nucleus, ZDXC is expressed at high levels in heart, kidney, liver and testis, with lower levels of expression in lung, muscle, placenta, small intestine and spleen. ZDXC, with ZDXA, forms a complex that binds to the class II *trans*-activator (CIITA). CIITA, like the X1-binding regulatory factor X (RFX) complex and the nuclear factor Y (NFY) complex, is a transcriptional cofactor that is necessary, but not sufficient, for major histocompatibility complex (MHC) class II gene transcription. ZXDC, by regulating CIITA function, activates the transcription of MHC genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ZXDC (human) mapping to 3q21.2.

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.

PRODUCT

ZXDC 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 ZXDC shRNA Plasmid (h): sc-78259-SH and ZXDC shRNA (h) Lentiviral Particles: sc-78259-V as alternate gene silencing products.

For independent verification of ZXDC (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-78259A, sc-78259B and sc-78259C.

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

ZXDC siRNA (h) is recommended for the inhibition of ZXDC 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 ZXDC gene expression knockdown using RT-PCR Primer: ZXDC (h)-PR: sc-78259-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.