

ZDHHC25 siRNA (m): sc-155503

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. ZDHHC25 (zinc finger, DHHC domain containing 25), is a 279 amino acid protein that may function as a palmitoyltransferase, catalyzing the transformation of palmitoyl-CoA and a cysteine-conjugated protein to an S-palmitoyl protein and free CoA. The gene encoding ZDHHC25 maps to mouse chromosome 15, which houses over 1000 genes that encode for a variety of proteins, including zinc fingers, histones, synthases and transcriptional regulators. The genes that are localized to chromosome 15 may play a role in development and cellular differentiation. The c-Myc gene is located on mouse chromosome 15, which amplification of this gene has been found in several types of tumors including lung, breast and colon carcinomas.

REFERENCES

1. Putilina, T., et al. 1999. The DHHC domain: a new highly conserved cysteine-rich motif. *Mol. Cell. Biochem.* 195: 219-226.
2. Roth, A.F., et al. 2002. The yeast DHHC cysteine-rich domain protein Akrlp is a palmitoyltransferase. *J. Cell Biol.* 159: 23-28.
3. Chick, W.S., et al. 2005. X-ray-induced deletion complexes in embryonic stem cells on mouse chromosome 15. *Mamm. Genome* 16: 661-671.
4. Ohno, Y., et al. 2006. Intracellular localization and tissue-specific distribution of human and yeast DHHC cysteine-rich domain-containing proteins. *Biochim. Biophys. Acta* 1761: 474-483.
5. Mitchell, D.A., et al. 2006. Protein palmitoylation by a family of DHHC protein S-acyltransferases. *J. Lipid Res.* 47: 1118-1127.
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CHROMOSOMAL LOCATION

Genetic locus: *Zdhhc25* (mouse) mapping to 15 E3.

PRODUCT

ZDHHC25 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 ZDHHC25 shRNA Plasmid (m): sc-155503-SH and ZDHHC25 shRNA (m) Lentiviral Particles: sc-155503-V as alternate gene silencing products.

For independent verification of ZDHHC25 (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-155503A, sc-155503B and sc-155503C.

PROTOCOLS

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

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

ZDHHC25 siRNA (m) is recommended for the inhibition of ZDHHC25 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 ZDHHC25 gene expression knockdown using RT-PCR Primer: ZDHHC25 (m)-PR: sc-155503-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.