SANTA CRUZ BIOTECHNOLOGY, INC.

C35 siRNA (h): sc-72767

BACKGROUND

C35, also known as XTP4 (HBV X-transactivated gene 4) and protein C17orf37, is a 115 amino acid cytoplasmic protein that is a member of the SelWTH protein family. SelWTH proteins contain a thioredoxin-like fold and a conserved CxxC or CxxU motif, suggesting that they may play functional role in redox reactions. Although found at trace levels in normal breast ductal epithelium and testis, expression of C35 is robust in infiltrating ductal carcinomas of the breast, lobular carcinoma, as well as distant metastases of breast cancer such as liver, lung and skin. The prevalence and abundance of C35 overexpression in tumors suggest that it may be an appropriate bio-marker for diagnosis and a potential target for therapeutic intervention.

REFERENCES

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3. Benusiglio, P.R., et al. 2006. HapMap-based study of the 17q21 ERBB2 amplicon in susceptibility to breast cancer. Br. J. Cancer 95: 1689-1695.
4. Maqani, N., et al. 2006. Molecular dissection of 17q12 amplicon in upper gastrointestinal adenocarcinomas. Mol. Cancer Res. 4: 449-455.
5. Evans, E.E., et al. 2006. C35 (C17orf37) is a novel tumor biomarker abundantly expressed in breast cancer. Mol. Cancer Ther. 5: 2919-2930.
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CHROMOSOMAL LOCATION

Genetic locus: MIEN1 (human) mapping to 17q12.

PRODUCT

C35 siRNA (h) is a pool of 2 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 C35 shRNA Plasmid (h): sc-72767-SH and C35 shRNA (h) Lentiviral Particles: sc-72767-V as alternate gene silencing products.

For independent verification of C35 (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-72767A and sc-72767B.

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

C35 siRNA (h) is recommended for the inhibition of C35 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 C35 gene expression knockdown using RT-PCR Primer: C35 (h)-PR: sc-72767-PR (20 µl). 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.