SANTA CRUZ BIOTECHNOLOGY, INC.

ARMCX2 siRNA (m): sc-141263

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The armadillo (ARM) repeat family of proteins are related to the *Drosophila melanogaster* armadillo protein, a protein essential for wingless signal transduction. ARM proteins are involved in a variety of processes such as cell migration, cell proliferation, tissue maintenance and tumorigenesis, and they also function in signal transduction and the maintenance of overall cell structure. ARMCX2 (armadillo repeat containing, X-linked 2), also known as ALEX2, is a 632 amino acid single-pass membrane protein that contains three ARM repeats and is highly expressed in testis, brain, ovary, heart, colon, spleen and prostate, where it is thought to play a role in tumor suppression. The gene encoding ARMCX2 maps to human chromosome Xq22.1, which contains nearly 153 million base pairs and houses over 1,000 genes.

REFERENCES

1. Bonaldo, M.F., et al. 1996. Normalization and subtraction: two approaches to facilitate gene discovery. Genome Res. 6: 791-806.
2. Loureiro, J., et al. 1998. Roles of armadillo, a *Drosophila* catenin, during central nervous system development. Curr. Biol. 8: 622-632.
3. Nagase, T., et al. 1998. Prediction of the coding sequences of unidentified human genes. IX. The complete sequences of 100 new cDNA clones from brain which can code for large proteins *in vitro*. DNA Res. 5: 31-39.
4. Hatzfeld, M. 1999. The armadillo family of structural proteins. Int. Rev. Cytol. 186: 179-224.
5. Kurochkin, I.V., et al. 2001. ALEX1, a novel human armadillo repeat protein that is expressed differentially in normal tissues and carcinomas. Biochem. Biophys. Res. Commun. 280: 340-347.
6. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 300363. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: Armcx2 (mouse) mapping to X E3.

PRODUCT

ARMCX2 siRNA (m) is a target-specific 19-25 nt siRNA 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 ARMCX2 shRNA Plasmid (m): sc-141263-SH and ARMCX2 shRNA (m) Lentiviral Particles: sc-141263-V as alternate gene silencing 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 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

ARMCX2 siRNA (m) is recommended for the inhibition of ARMCX2 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 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 ARMCX2 gene expression knockdown using RT-PCR Primer: ARMCX2 (m)-PR: sc-141263-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.