

# ARMCX6 siRNA (h): sc-90927

## 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. They are intracellular proteins and function in signal transduction and cell structure. Members of the ARM family include ARM CX1, ARM CX2, ARM CX3, ARM CX4, ARM CX5 and ARM CX6. ARM CX6 (armadillo repeat containing, X-linked 6) is a 300 amino acid single-pass membrane protein belonging to the ARM family of proteins and may play a role in signal transduction.

## REFERENCES

1. 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.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 300364. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Hsia, N., et al. 2004. DNA microarray analysis of region-specific gene expression in the mouse epididymis. *Biol. Reprod.* 70: 448-457.
4. Smith, C.A., et al. 2005. Temporal and spatial expression profile of the novel armadillo-related gene, Alex2, during testicular differentiation in the mouse embryo. *Dev. Dyn.* 233: 188-193.
5. Olsen, J.V., et al. 2006. Global, *in vivo*, and site-specific phosphorylation dynamics in signaling networks. *Cell* 127: 635-648.

## CHROMOSOMAL LOCATION

Genetic locus: ARM CX6 (human) mapping to Xq22.1.

## PRODUCT

ARM CX6 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ARM CX6 shRNA Plasmid (h): sc-90927-SH and ARM CX6 shRNA (h) Lentiviral Particles: sc-90927-V as alternate gene silencing products.

For independent verification of ARM CX6 (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-90927A, sc-90927B and sc-90927C.

## 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

ARM CX6 siRNA (h) is recommended for the inhibition of ARM CX6 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  $\mu$ M in 66  $\mu$ 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 ARM CX6 gene expression knockdown using RT-PCR Primer: ARM CX6 (h)-PR: sc-90927-PR (20  $\mu$ 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.