SANTA CRUZ BIOTECHNOLOGY, INC.

ARMC6 siRNA (m): sc-141258

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. They are intracellular proteins that function in signal transduction and cell structure. ARMC6 (armadillo repeat-containing protein 6) is a 501 amino acid protein that contains four ARM domains. The gene encoding ARMC6 maps to chromosome 19p13.11. Chromosome 19 is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fc receptors.

REFERENCES

1. Kawamura, Y., et al. 1999. Expression of the mRNA for two isoforms of neural plakophilin-related arm-repeat protein/δ-catenin in rodent neurons and glial cells. Neurosci. Lett. 277: 185-188.
2. 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.
3. Coates, J.C. 2003. Armadillo repeat proteins: beyond the animal kingdom. Trends Cell Biol. 13: 463-471.
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. Park, J.H., et al. 2006. PDZ-binding kinase/T-LAK cell-originated protein kinase, a putative cancer/testis antigen with an oncogenic activity in breast cancer. Cancer Res. 66: 9186-9195.
6. Okada, T., et al. 2006. A novel cancer testis antigen that is frequently expressed in pancreatic, lung, and endometrial cancers. Clin. Cancer Res. 12: 191-197.
7. Li, X., et al. 2006. Cloning and expression of ARMC3_v2, a novel splicing variant of the human ARMC3 gene. Genetika 42: 999-1003.

CHROMOSOMAL LOCATION

Genetic locus: Armc6 (mouse) mapping to 8 B3.3.

PRODUCT

ARMC6 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 ARMC6 shRNA Plasmid (m): sc-141258-SH and ARMC6 shRNA (m) Lentiviral Particles: sc-141258-V as alternate gene silencing products.

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 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

ARMC6 siRNA (m) is recommended for the inhibition of ARMC6 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 ARMC6 gene expression knockdown using RT-PCR Primer: ARMC6 (m)-PR: sc-141258-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.