SANTA CRUZ BIOTECHNOLOGY, INC.

AKR1C12 siRNA (m): sc-140986

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The Power to Question

BACKGROUND

Members of the aldo-keto reductase (AKR) family are soluble NADPH-dependent oxidoreductases that play important roles in the metabolism of drugs, carcinogens and reactive aldehydes, and may also act as bile acid-binding proteins. There are 12 human ARK proteins and 15 rodent ARK proteins, all of which function as oxidoreductases that may regulate a variety of reactions throughout the cell. AKR1C12 (aldo-keto reductase family 1, member C12), also known as Akra or AI266976, is a 323 amino acid protein. Belonging to the AKR superfamily, AKR1C12 is highly expressed in stomach. The gene encoding AKR1C12 maps to mouse chromosome 13 A1. The gene encoding AKR1C12 maps to mouse chromosome 13 A1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Akr1c12 (mouse) mapping to 13 A1.

PRODUCT

AKR1C12 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 AKR1C12 shRNA Plasmid (m): sc-140986-SH and AKR1C12 shRNA (m) Lentiviral Particles: sc-140986-V as alternate gene silencing products.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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

AKR1C12 siRNA (m) is recommended for the inhibition of AKR1C12 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 AKR1C12 gene expression knockdown using RT-PCR Primer: AKR1C12 (m)-PR: sc-140986-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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