SANTA CRUZ BIOTECHNOLOGY, INC.

AKR1C13 siRNA (m): sc-140987

BACKGROUND

AKR1C13 (aldo-keto reductase family 1 member C13) is a 323 amino acid monomeric protein that belongs to the aldo-keto reductase family. Using nicotinamide dinucleotide as a cofactor, proteins belonging to the aldo-keto reductase family catalyze reactions with a diverse range of substrates, including prostaglandins (PGs), monosaccharides, steroids, and xenobiotic aldehydes and ketones. Some members of the aldo-keto reductase family, including AKR1C13, also act as bile acid-binding proteins. The gene that encodes AKR1C13 maps to mouse chromosome 13 A1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Akr1c13 (mouse) mapping to 13 A1.

PRODUCT

AKR1C13 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 AKR1C13 shRNA Plasmid (m): sc-140987-SH and AKR1C13 shRNA (m) Lentiviral Particles: sc-140987-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

AKR1C13 siRNA (m) is recommended for the inhibition of AKR1C13 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 AKR1C13 gene expression knockdown using RT-PCR Primer: AKR1C13 (m)-PR: sc-140987-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.