SANTA CRUZ BIOTECHNOLOGY, INC.

ARL15 siRNA (m): sc-141240

BACKGROUND

ADP-ribosylation factors (ARFs) are highly conserved guanine nucleotide binding proteins that enhance the ADP-ribosyltransferase activity of cholera toxin. ARFs are important in eukaryotic vesicular trafficking pathways and play an essential role in the activation of phospholipase D (PC-PLD). ARL15 (ADP-ribosylation factor-like 15), also known as ARFRP2 (ARF-related protein 2), is a 204 amino acid protein that belongs to the small GTPase superfamily and the ARF family. Conserved in chimpanzee, canine, bovine, mouse, rat, chicken and zebrafish, ARL15 participates in both GTP and nucleotide binding. ARL15 variants influence levels of Acrp30, an adipocyte-derived protein that is particularly heritable and inversely associated with risk of type 2 diabetes mellitus and coronary heart disease. ARL15 is encoded by a gene that maps to human chromosome 5q11.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Arl15 (mouse) mapping to 13 D2.2.

PRODUCT

ARL15 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 ARL15 shRNA Plasmid (m): sc-141240-SH and ARL15 shRNA (m) Lentiviral Particles: sc-141240-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

ARL15 siRNA (m) is recommended for the inhibition of ARL15 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 ARL15 gene expression knockdown using RT-PCR Primer: ARL15 (m)-PR: sc-141240-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.