SANTA CRUZ BIOTECHNOLOGY, INC.

DPPL2 siRNA (h): sc-90809

BACKGROUND

DPPL2, also known as PPAPDC1A (phosphatidic acid phosphatase type 2 domain containing 1A), is a 271 amino acid membrane protein that belongs to the PA-phosphatase related phosphoesterase family. DPPL2 displays magnesium-independent phosphatidate phosphatase activity *in vitro* and catalyzes the conversion of phosphatidic acid to diacylglycerol. Inhibited by N-ethylmaleimide, DPPL2 is expressed mainly in brain, testis and kidney, with lower levels found in thymus, bone marrow, liver, prostate and uterus. DPPL2 is present as four isoforms produced by alternative splicing events and is expressed by a gene mapping to human chromosome 10q26.12 and murine chromosome 7 F3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PPAPDC1A (human) mapping to 10q26.12.

PRODUCT

DPPL2 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see DPPL2 shRNA Plasmid (h): sc-90809-SH and DPPL2 shRNA (h) Lentiviral Particles: sc-90809-V as alternate gene silencing products.

For independent verification of DPPL2 (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-90809A, sc-90809B and sc-90809C.

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

DPPL2 siRNA (h) is recommended for the inhibition of DPPL2 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 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 DPPL2 gene expression knockdown using RT-PCR Primer: DPPL2 (h)-PR: sc-90809-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.