SANTA CRUZ BIOTECHNOLOGY, INC.

GLYATL2 siRNA (h): sc-96946

BACKGROUND

GLYATL2 (glycine N-acyltransferase-like protein 2), also known as acyl-CoA:glycine N-acyltransferase-like protein 2, is a 294 amino acid mitochondrial acyltransferase that transfers the acyl group to the N-terminus of glycine. GLYATL2 can also conjugate a multitude of substrates, including oleoyl-CoA and arachidonoyl-CoA, to form a variety of N-acylglycines. A member of the glycine N-acyltransferase family, GLYATL2 is encoded by a gene that maps to human chromosome 11q12.1. Chromosome 11 houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GLYATL2 (human) mapping to 11q12.1.

RESEARCH USE

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

PRODUCT

GLYATL2 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 GLYATL2 shRNA Plasmid (h): sc-96946-SH and GLYATL2 shRNA (h) Lentiviral Particles: sc-96946-V as alternate gene silencing products.

For independent verification of GLYATL2 (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-96946A, sc-96946B and sc-96946C.

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

GLYATL2 siRNA (h) is recommended for the inhibition of GLYATL2 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 GLYATL2 gene expression knockdown using RT-PCR Primer: GLYATL2 (h)-PR: sc-96946-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.