

AMAC1L2 siRNA (h): sc-77848

BACKGROUND

AMAC1 (acyl-malonyl condensing enzyme 1), also known as TMEM21A (transmembrane protein 21A), is a 338 amino acid multi-pass membrane protein that contains two DUF6 domains and is highly expressed in testis. AMAC1L1, AMAC1L2 and AMAC1L3 are acyl-malonyl condensing enzyme 1-like proteins that, similar to AMAC1, contain DUF6 domains and are present in tissues such as placenta and testis. Human AMAC1 and AMAC1L3 are encoded by genes which map to chromosome 17, while human AMAC1L1 and AMAC1L2 are encoded by genes that map to chromosomes 18 and 8, respectively. Together, chromosomes 8, 17 and 18 encode over 2,300 genes, some of which include the tumor suppressors p53 and BRCA1, as well as genes that are associated with Edwards syndrome, Niemann-Pick disease, Pfeiffer syndrome and congenital hypothyroidism.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC35G5 (human) mapping to 8p23.1.

PRODUCT

AMAC1L2 siRNA (h) 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see AMAC1L2 shRNA Plasmid (h): sc-77848-SH and AMAC1L2 shRNA (h) Lentiviral Particles: sc-77848-V as alternate gene silencing products.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support 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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

AMAC1L2 siRNA (h) is recommended for the inhibition of AMAC1L2 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 μ M in 66 μ l. 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 AMAC1L2 gene expression knockdown using RT-PCR Primer: AMAC1L2 (h)-PR: sc-77848-PR (20 μ l). 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.