

ACBD7 siRNA (h): sc-90375

BACKGROUND

ACBD7 (acyl-CoA binding domain containing 7), also known as acyl-coenzyme A binding domain containing 7, is an 88 amino acid protein belonging to the ACBD7 family. Encoded by a gene that maps to human chromosome 10p13, ACBD7 contains one ACB (acyl-CoA-binding) domain and participates in acyl-CoA binding and tissue-specific expression. Expressed in spleen, thymus and brain, ACBD7 is very similar to ACBD1 in predicted amino acid sequence. Due to its expression in brain, ACBD7 was formerly coined brain ACBP (B-ACBP). Early evolutionary existence of ACBD7 may indicate a fundamental role in acyl-CoA metabolism, ceramide synthesis and signaling. ACBD7 is highly conserved across phylums.

REFERENCES

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- SWISS-PROT/TrEMBL (Q8N6N7). World Wide Web URL: <http://www.uniprot.org/uniprot/Q8N6N7>

CHROMOSOMAL LOCATION

Genetic locus: ACBD7 (human) mapping to 10p13.

PRODUCT

ACBD7 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ACBD7 shRNA Plasmid (h): sc-90375-SH and ACBD7 shRNA (h) Lentiviral Particles: sc-90375-V as alternate gene silencing products.

For independent verification of ACBD7 (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-90375A, sc-90375B and sc-90375C.

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

ACBD7 siRNA (h) is recommended for the inhibition of ACBD7 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 ACBD7 gene expression knockdown using RT-PCR Primer: ACBD7 (h)-PR: sc-90375-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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.