SANTA CRUZ BIOTECHNOLOGY, INC.

SCOCO siRNA (h): sc-88869

BACKGROUND

SCOCO (short coiled-coil protein) is a 159 amino acid protein that belongs to the SCOC family. SCOCO interacts with ARL1, ARL2 and ARL3, which are ADP-ribosylation factor-like proteins. Localizing to nucleus and Golgi apparatus, the SCOCO protein is most highly expressed in brain, heart and skeletal muscle, but is not present in lung. The sequence of SCOCO shows that a tyrosine residue near the C terminus is invariant in all species that have been so far examined. Existing as four alternatively splice isoforms, the SCOCO gene is conserved in chimpanzee, canine, mouse, rat, chicken and zebrafish, and maps to human chromosome 4q31.1. Pseudogenes of the SCOCO gene are found on chromosomes 1 and 14. Representing approximately 6% of the human genome, chromosome 4 contains nearly 900 genes. Chromosome 4 reportedly contains the largest gene deserts (regions of the genome with no protein encoding genes) and has one of the two lowest recombination frequencies of the human chromosomes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SCOC (human) mapping to 4q31.1.

PROTOCOLS

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

PRODUCT

SCOCO 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 SCOCO shRNA Plasmid (h): sc-88869-SH and SCOCO shRNA (h) Lentiviral Particles: sc-88869-V as alternate gene silencing products.

For independent verification of SCOCO (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-88869A, sc-88869B and sc-88869C.

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

SCOCO siRNA (h) is recommended for the inhibition of SCOCO 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 SCOCO gene expression knockdown using RT-PCR Primer: SCOCO (h)-PR: sc-88869-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.