SANTA CRUZ BIOTECHNOLOGY, INC.

CCDC28A siRNA (h): sc-95248

BACKGROUND

CCDC28A (coiled-coil domain-containing protein 28A), also known as CCRL1AP, is a 274 amino acid protein that is encoded by a gene that maps to human chromosome 6. Containing 170 million base pairs, human chromosome 6 comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

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2. Brunner, H.G., et al. 1994. A Stickler syndrome gene is linked to chromosome 6 near the COL11A2 gene. Hum. Mol. Genet. 3: 1561-1564.
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4. Foltynie, T., et al. 2002. The genetic basis of Parkinson's disease. J. Neurol. Neurosurg. Psychiatr. 73: 363-370.
5. Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. Nature 425: 805-811.
6. Abou Jamra, R., et al. 2007. The first genomewide interaction and locus-heterogeneity linkage scan in bipolar affective disorder: strong evidence of epistatic effects between loci on chromosomes 2q and 6q. Am. J. Hum. Genet. 81: 974-986.
7. Panagopoulos, I., et al. 2007. Fusion of NUP98 and the SET binding protein 1 (SETBP1) gene in a paediatric acute T cell lymphoblastic leukaemia with t(11;18)(p15;q12). Br. J. Haematol. 136: 294-296.
8. Knight, J., et al. 2010. An investigation of candidate regions for association with bipolar disorder. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B: 1292-1297.

CHROMOSOMAL LOCATION

Genetic locus: CCDC28A (human) mapping to 6q24.1.

PRODUCT

CCDC28A 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 CCDC28A shRNA Plasmid (h): sc-95248-SH and CCDC28A shRNA (h) Lentiviral Particles: sc-95248-V as alternate gene silencing products.

For independent verification of CCDC28A (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-95248A, sc-95248B and sc-95248C.

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 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

CCDC28A siRNA (h) is recommended for the inhibition of CCDC28A 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 CCDC28A gene expression knockdown using RT-PCR Primer: CCDC28A (h)-PR: sc-95248-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.