

# ANKDD1B siRNA (m): sc-140543

## BACKGROUND

ANKDD1B (ankyrin repeat and death domain containing 1B) is a 467 amino acid protein that contains ten ANK repeats and one death domain. Conserved in chimpanzee, mouse and chicken, ANKDD1B is encoded by a gene that maps to human chromosome 5q13.3. With 181 million base pairs encoding approximately 1,000 genes, chromosome 5 makes up 6% of human genomic DNA. Chromosome 5 is associated with Cockayne syndrome through CSA, and with familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome, caused by insertions or deletions within Treacle, is also associated with chromosome 5. Deletion of 5q or chromosome 5 altogether is common in acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Ankdd1b (mouse) mapping to 13 D1.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## PRODUCT

ANKDD1B siRNA (m) 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ANKDD1B shRNA Plasmid (m): sc-140543-SH and ANKDD1B shRNA (m) Lentiviral Particles: sc-140543-V as alternate gene silencing products.

For independent verification of ANKDD1B (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-140543A, sc-140543B and sc-140543C.

## 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

ANKDD1B siRNA (m) is recommended for the inhibition of ANKDD1B expression in mouse 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  $\mu$ M in 66  $\mu$ 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 ANKDD1B gene expression knockdown using RT-PCR Primer: ANKDD1B (m)-PR: sc-140543-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.