

# ANKIB1 siRNA (m): sc-141068

## BACKGROUND

ANKIB1 (ankyrin repeat and IBR domain containing 1) is a 1,089 amino acid, ubiquitin-interacting motif (UIM) protein belonging to the RBR family. Encoded by a gene that maps to human chromosome 7q21.2, ANKIB1 is conserved in chimpanzee, canine, bovine, mouse, rat, chicken and zebrafish. ANKIB1 contains two ANK repeats, two RING-type zinc fingers, one UIM repeat and one IBR-type zinc finger. However, ANKIB1 lacks one Cys residue in its IBR-type zinc finger domain. ANKIB1 participates in protein and zinc ion binding, and may act as an E3 ubiquitin-protein ligase, or as part of the E3 complex, which receives ubiquitin from E2 ubiquitin-conjugating enzymes and moves it to substrates. Deletion of human chromosome 7q21.2 (KRIT1 locus), which includes partial loss of the ANKIB1 gene, is linked to cerebral cavernous malformations, a common autosomal dominant disorder that predisposes patients to haemorrhagic strokes and focal neurological signs.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Ankib1 (mouse) mapping to 5 A1.

## PROTOCOLS

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

## PRODUCT

ANKIB1 siRNA (m) 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ANKIB1 shRNA Plasmid (m): sc-141068-SH and ANKIB1 shRNA (m) Lentiviral Particles: sc-141068-V as alternate gene silencing 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  $\mu$ 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

ANKIB1 siRNA (m) is recommended for the inhibition of ANKIB1 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 ANKIB1 gene expression knockdown using RT-PCR Primer: ANKIB1 (m)-PR: sc-141068-PR (20  $\mu$ 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.