SANTA CRUZ BIOTECHNOLOGY, INC.

ANKIB1 siRNA (h): sc-89667

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.

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CHROMOSOMAL LOCATION

Genetic locus: ANKIB1 (human) mapping to 7q21.2.

PROTOCOLS

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

PRODUCT

ANKIB1 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 ANKIB1 shRNA Plasmid (h): sc-89667-SH and ANKIB1 shRNA (h) Lentiviral Particles: sc-89667-V as alternate gene silencing products.

For independent verification of ANKIB1 (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-89667A, sc-89667B and sc-89667C.

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

ANKIB1 siRNA (h) is recommended for the inhibition of ANKIB1 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 ANKIB1 gene expression knockdown using RT-PCR Primer: ANKIB1 (h)-PR: sc-89667-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.