SANTA CRUZ BIOTECHNOLOGY, INC.

ANKS4B siRNA (h): sc-93389

BACKGROUND

ANKS4B (ankyrin repeat and sterile α motif domain containing 4B), also known as Harp (harmonin-interacting ankyrin repeat-containing protein), is a 460 amino acid coiled-coil protein that interacts with the Harmonin PDZ1 domain in epithelial tissues by way of its C-terminus. Encoded by a gene that maps to human chromosome 16p12.2, ANKS4B contains two exons, three ANK repeats and one SAM (sterile α motif) domain. ANKS4B is expressed in kidney, liver, small intestine, colon, pancreas and purified pancreatic cells, as well as developing lung, kidney, salivary glands and cochlea. Conserved in chimpanzee, canine, bovine, mouse, chicken and zebrafish, ANKS4B shares significant homology with USH1G, which plays a major role in Usher syndrome. ANKS4B may also play a role in Usher syndrome and may facilitate signal transduction in epithelia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ANKS4B (human) mapping to 16p12.2.

PROTOCOLS

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

PRODUCT

ANKS4B 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 ANKS4B shRNA Plasmid (h): sc-93389-SH and ANKS4B shRNA (h) Lentiviral Particles: sc-93389-V as alternate gene silencing products.

For independent verification of ANKS4B (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-93389A, sc-93389B and sc-93389C.

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

ANKS4B siRNA (h) is recommended for the inhibition of ANKS4B 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 ANKS4B gene expression knockdown using RT-PCR Primer: ANKS4B (h)-PR: sc-93389-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.