SANTA CRUZ BIOTECHNOLOGY, INC.

shrew-1 siRNA (h): sc-88691

BACKGROUND

Shrew-1, also known as AJAP1 (adherens junctions associated protein 1), is a 411 amino acid single-pass type III membrane protein that plays a role in inhibiting glioma cell adhesion and cell migration. Shrew-1 is expressed, at protein level, in uterus and pancreas, and preferentially in tissues of early development, specifically adheren junctions. Shrew-1 forms a complex with CDH1 and CTNNB1 by interacting directly with CTNNB1. Shrew-1 interacts with AP1M2 and BSG/CD147. Localization of shrew-1 is mediated by AP1M2. It has been suggested that shrew-1 may be a tumor suppressor whose function can be attenuated by a loss in copy number and a decrease in expression. The shrew-1 gene is conserved in chimpanzee, canine, bovine, mouse and zebrafish, and maps to human chromosome 1p36.32. Deletions in the 1p36 region have been found in neuroblastomas.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: AJAP1 (human) mapping to 1p36.32.

PRODUCT

shrew-1 siRNA (h) is a pool of 2 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 shrew-1 shRNA Plasmid (h): sc-88691-SH and shrew-1 shRNA (h) Lentiviral Particles: sc-88691-V as alternate gene silencing products.

For independent verification of shrew-1 (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-88691A and sc-88691B.

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

shrew-1 siRNA (h) is recommended for the inhibition of shrew-1 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 shrew-1 gene expression knockdown using RT-PCR Primer: shrew-1 (h)-PR: sc-88691-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.

PROTOCOLS

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