SANTA CRUZ BIOTECHNOLOGY, INC.

VIK-1 siRNA (h): sc-106820

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. Vav-interacting Krüppel-like protein (VIK-1), also known as zinc finger protein 655 (ZNF655), is a 491 amino acid member of the Krüppel C_2H_2-type zinc-finger protein family. Localized primarily to the nucleus, VIK-1 shuttles between the nucleus and the cytoplasm and interacts with c-SH3, one of the three Src domains of Vav that determines its subcellular localization. VIK-1 also plays a roll in cell-cycle progression. VIK-1 interacts with cyclin-dependent kinase 4 (Cdk4) and is involved in inhibiting the G1/S transition of the cell-cycle.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ZNF655 (human) mapping to 7q22.1.

PRODUCT

VIK-1 siRNA (h) 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see VIK-1 shRNA Plasmid (h): sc-106820-SH and VIK-1 shRNA (h) Lentiviral Particles: sc-106820-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 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

VIK-1 siRNA (h) is recommended for the inhibition of VIK-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 VIK-1 gene expression knockdown using RT-PCR Primer: VIK-1 (h)-PR: sc-106820-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.