SANTA CRUZ BIOTECHNOLOGY, INC.

CNK2 siRNA (m): sc-142434

BACKGROUND

CNK2 (connector enhancer of kinase suppressor of Ras 2), also known as KSR2 or CNKSR2, is a 1,034 amino acid cytoplasmic and peripheral membrane protein involved in the RAS-dependent signaling pathway. RAS is essential for integrating and transmitting proliferation, differentiation and survival signals elicited by membrane receptors to downstream effector pathways. RAF is part of the RAS-dependent signaling pathway and is involved in the transduction of mitogenic signals from the cell membrane to the nucleus. A member of the CNKSR family, CNK2 contains one CRIC domain, a SAM (sterile α motif) domain, one PH domain, a PZD domain and a single DUF1170 domain. CNK2 exists as two alternatively spliced isoforms that undergo post-translational phosphorylation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Cnksr2 (mouse) mapping to X F4.

PROTOCOLS

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

PRODUCT

CNK2 siRNA (m) 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 CNK2 shRNA Plasmid (m): sc-142434-SH and CNK2 shRNA (m) Lentiviral Particles: sc-142434-V as alternate gene silencing products.

For independent verification of CNK2 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-142434A, sc-142434B and sc-142434C.

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

CNK2 siRNA (m) is recommended for the inhibition of CNK2 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 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 CNK2 gene expression knockdown using RT-PCR Primer: CNK2 (m)-PR: sc-142434-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.