SANTA CRUZ BIOTECHNOLOGY, INC.

Neuron navigator 2 siRNA (h): sc-96275

BACKGROUND

Neuron navigator 2 (NAV2), also known as RAINB1 (retinoic acid inducible in neuroblastoma 1), POMFIL2 (pore membrane and/or filament-interacting-like protein 2), HELAD1 (helicase APC down-regulated 1), unc53H2 or steerin-2, is a 2,488 amino acid nuclear protein that plays a role in the development of sensory organs. Existing as 13 alternatively spliced isoforms, Neuron navigator 2 displays 3' to 5' helicase activity and exonuclease activity and participates in the catalysis of ATP to ADP. Neuron navigator 2 is highly expressed in the nervous system of developing embryos and colon carcinomas, as well as in liver, brain and kidney. Lower levels of expression are found in lung, thyroid, spinal cord, heart, placenta and mammary gland. Neuron navigator 2 belongs to the Nav/unc-53 family and contains one CH (calponin-homology) domain.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NAV2 (human) mapping to 11p15.1.

PROTOCOLS

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

PRODUCT

Neuron navigator 2 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 Neuron navigator 2 shRNA Plasmid (h): sc-96275-SH and Neuron navigator 2 shRNA (h) Lentiviral Particles: sc-96275-V as alternate gene silencing products.

For independent verification of Neuron navigator 2 (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-96275A, sc-96275B and sc-96275C.

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

Neuron navigator 2 siRNA (h) is recommended for the inhibition of Neuron navigator 2 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 Neuron navigator 2 gene expression knockdown using RT-PCR Primer: Neuron navigator 2 (h)-PR: sc-96275-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.