SANTA CRUZ BIOTECHNOLOGY, INC.

KIAA0922 siRNA (h): sc-88860

BACKGROUND

KIAA0922, also known as transmembrane protein 131-like (TMEM131L) is a 1,609 amino acid single-pass type I membrane protein that belongs to the TMEM131 famliy. KIAA0922 contains one cytoplasmic domain, one extracellular domain, one phosphylated serine residue at postion 1,122 and is heavily glycosylated. KIAA0922 exists as 4 alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 4q31.3, which represents approximately 6% of the human genome and contains nearly 900 genes. Notably, the Huntingtin gene, which is found to encode an expanded glutamine tract in cases of Huntington's disease, is on chromosome 4. FGFR-3 is also encoded on a gene that maps to chromosome 4 and has been associated with thanatophoric dwarfism, achondroplasia, Muenke syndrome and bladder cancer. Chromosome 4 is also tied to Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KIAA0922 (human) mapping to 4q31.3.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

KIAA0922 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 KIAA0922 shRNA Plasmid (h): sc-88860-SH and KIAA0922 shRNA (h) Lentiviral Particles: sc-88860-V as alternate gene silencing products.

For independent verification of KIAA0922 (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-88860A, sc-88860B and sc-88860C.

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

KIAA0922 siRNA (h) is recommended for the inhibition of KIAA0922 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 KIAA0922 gene expression knockdown using RT-PCR Primer: KIAA0922 (h)-PR: sc-88860-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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