SANTA CRUZ BIOTECHNOLOGY, INC.

KLHL24 siRNA (m): sc-146524

BACKGROUND

KLHL24 (kelch-like protein 24) is a 600 amino acid protein that is related to the *Drosophila* kelch protein, which is required to maintain Actin organization in ovarian ring canals. Mutations affecting Kelch function result in failure of Kelch to associate with the ring canals and subsequent female sterility. Human KLHL24 protein contains six kelch repeats, one BACK (BTB/Kelch associated) domain and one BTB (POZ) domain. The BTB (Broad-Complex, Tramtrack and Bric a brac) domain, also known as the POZ (Poxvirus and zinc finger) domain, is an N-terminal homodimerization domain that contains multiple copies of kelch repeats and/or C_2H_2-type zinc fingers. KLHL24 is widely expressed in brain where it regulates the function of GluR-6 by binding to its C-terminal domain. There are three isoforms of KLHL24 that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Klhl24 (mouse) mapping to 16 A3.

RESEARCH USE

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

PRODUCT

KLHL24 siRNA (m) 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 KLHL24 shRNA Plasmid (m): sc-146524-SH and KLHL24 shRNA (m) Lentiviral Particles: sc-146524-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

KLHL24 siRNA (m) is recommended for the inhibition of KLHL24 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 KLHL24 gene expression knockdown using RT-PCR Primer: KLHL24 (m)-PR: sc-146524-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.