SANTA CRUZ BIOTECHNOLOGY, INC.

KTELC1 siRNA (m): sc-146608

BACKGROUND

KTELC1, also known as CLP46 or CAP10-like, is a KTEL motif-containing protein that belongs to the CAP10 family. The KTEL motif at the C-terminus of KTELC1 is an endoplasmic reticulum (ER) retention signal which localizes the KTELC1 protein to the lumen of the ER. KTELC1 is thought to promote cell proliferation and is also believed to be involved with hepatic functions. The Drosophila protein rumi, a CAP10 protein and likely similar in function to KTELC1, uses glucosylation to act as a Notch signaling regulator. Expressed in varying degrees in most adult tissue, KTELC1 is especially abundant in the liver. KTELC1 is not expressed in detectable levels in colon, thymus or small intestine. Human KTELC1 shares 94% and 91% sequence similarity with its bovine and mouse homologs, respectively.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Poglut1 (mouse) mapping to 16 B4.

PRODUCT

KTELC1 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 KTELC1 shRNA Plasmid (m): sc-146608-SH and KTELC1 shRNA (m) Lentiviral Particles: sc-146608-V as alternate gene silencing products.

PROTOCOLS

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

KTELC1 siRNA (m) is recommended for the inhibition of KTELC1 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 KTELC1 gene expression knockdown using RT-PCR Primer: KTELC1 (m)-PR: sc-146608-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.