SANTA CRUZ BIOTECHNOLOGY, INC.

# KCTD5 siRNA (m): sc-146396

## BACKGROUND

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. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function. KCTD5 (potassium channel tetramerisation domain containing 5) is a 234 amino acid protein that localizes predominantly in the cytoplasm but translocates to the nucleus upon interaction with REP proteins. Existing as a homopentamer and consisting of one BTB (POZ) domain, KCTD5 associates with GRASP55, CUL-3 and ubiquitinated proteins. Interaction with CUL-3 suggests KCTD5 functions as a substrate adapter protein in some E3 ligase complexes.

## REFERENCES


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## CHROMOSOMAL LOCATION

Genetic locus: Kctd5 (mouse) mapping to 17 A3.3.

## PRODUCT

KCTD5 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 KCTD5 shRNA Plasmid (m): sc-146396-SH and KCTD5 shRNA (m) Lentiviral Particles: sc-146396-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

KCTD5 siRNA (m) is recommended for the inhibition of KCTD5 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 KCTD5 gene expression knockdown using RT-PCR Primer: KCTD5 (m)-PR: sc-146396-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.

## PROTOCOLS

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