

KBTBD10 siRNA (h): sc-94395

BACKGROUND

KBTBD10 (kelch repeat and BTB domain-containing protein 10), also known as Kel-like protein 23, sarcosin or kelch-related protein 1, is a 606 amino acid cytoplasmic protein found in sarcomeric muscle. KBTBD10 plays an important role in the protein ubiquitination pathway by acting as the substrate-specific adaptor of an E3 ubiquitin-protein ligase complex. KBTBD10 forms this complex with CUL-3 and Rbx1, and also interacts with N-RAP. Although predominantly cytoplasmic, KBTBD10 can co-localize with Actin at the ruffle-like membrane structures located at the tips of pseudopodia, indicating a role in pseudopod elongation in transformed cells. KBTBD10 contains five Kelch repeats and one BTB (POZ) domain. Due to alternative splicing events, KBTBD10 exists as two isoforms.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KLHL41 (human) mapping to 2q31.1.

PROTOCOLS

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

PRODUCT

KBTBD10 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see KBTBD10 shRNA Plasmid (h): sc-94395-SH and KBTBD10 shRNA (h) Lentiviral Particles: sc-94395-V as alternate gene silencing products.

For independent verification of KBTBD10 (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-94395A, sc-94395B and sc-94395C.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

KBTBD10 siRNA (h) is recommended for the inhibition of KBTBD10 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 μ M in 66 μ l. 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 KBTBD10 gene expression knockdown using RT-PCR Primer: KBTBD10 (h)-PR: sc-94395-PR (20 μ l). 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.