

ZBTB40 siRNA (m): sc-155448

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 C₂H₂-type zinc fingers. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function. ZBTB40 (zinc finger and BTB domain containing 40), also known as ZNF923, is a 1,239 amino acid nuclear protein that may be involved in transcriptional regulation. ZBTB40 contains one BTB/POZ domain and 12 C₂H₂-type zinc fingers. As a result of alternative splicing events, two ZBTB8 isoforms exist. The gene encoding ZBTB40 maps to human chromosome 1p36.12, which spans about 260 million base pairs, makes up 8% of the human genome and contains approximately 3,000 genes. A large number of diseases and disorders are associated with chromosome 1 including Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome.

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CHROMOSOMAL LOCATION

Genetic locus: Zbtb40 (mouse) mapping to 4 D3.

PRODUCT

ZBTB40 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 ZBTB40 shRNA Plasmid (m): sc-155448-SH and ZBTB40 shRNA (m) Lentiviral Particles: sc-155448-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

ZBTB40 siRNA (m) is recommended for the inhibition of ZBTB40 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 ZBTB40 gene expression knockdown using RT-PCR Primer: ZBTB40 (m)-PR: sc-155448-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.