

ZBTB1 siRNA (m): sc-155435

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. ZBTB1 (zinc finger and BTB domain containing 1), also known as KIAA0997, is a 713 amino acid nuclear protein that contains one BTB (POZ) domain and eight C₂H₂-type zinc fingers and is thought to be involved in transcriptional regulation events. The gene encoding ZBTB1 maps to mouse chromosome 12 C3, which houses approximately 670 protein-coding genes and is one of the smaller murine chromosomes. Some of the genes that are located on chromosome 12 encode immunoglobulin heavy chain proteins (IgHs), Myosin light chain proteins, eukaryotic translation initiation factors (eIFs) and thyroid growth factors, suggesting that chromosome 12-localized genes play an important role in cellular growth and development.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Zbtb1 (mouse) mapping to 12 C3.

PRODUCT

ZBTB1 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ZBTB1 shRNA Plasmid (m): sc-155435-SH and ZBTB1 shRNA (m) Lentiviral Particles: sc-155435-V as alternate gene silencing products.

RESEARCH USE

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

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

ZBTB1 siRNA (m) is recommended for the inhibition of ZBTB1 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 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 ZBTB1 gene expression knockdown using RT-PCR Primer: ZBTB1 (m)-PR: sc-155435-PR (20 μ l). 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.