SANTA CRUZ BIOTECHNOLOGY, INC.

ABTB2 siRNA (h): sc-96681

BACKGROUND

ABTB2 (ankyrin repeat and BTB/POZ domain-containing protein 2) is a 839 amino acid protein that contains four ANK repeats and one BTB (POZ) domain. The BTB (broad-complex, tramtrack and bric a brac) domain, also known as the POZ (pox virus 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. ANK repeats are among the most common structural motifs in known proteins and are involved in protein-protein interactions in a diverse set of cellular functions. It is suggested that ABTB2 may be involved in the initiation of hepatocyte growth.

REFERENCES

1. Huynh, K.D. and Bardwell, V.J. 1998. The Bcl-6 POZ domain and other POZ domains interact with the co-repressors N-CoR and SMRT. Oncogene 17: 2473-2484.
2. Deltour, S., Guerardel, C. and Leprince, D. 1999. Recruitment of SMRT/N-CoR-mSin3A-HDAC-repressing complexes is not a general mechanism for BTB/POZ transcriptional repressors: the case of HIC-1 and γFBP-B. Proc. Natl. Acad. Sci. USA 96: 14831-14836.
3. Dai, K.S., Wei, W. and Liew, C.C. 2000. Molecular cloning and characterization of a novel human gene containing ankyrin repeat and double BTB/POZ domain. Biochem. Biophys. Res. Commun. 273: 991-996.
4. Melnick, A., Ahmad, K.F., Arai, S., Polinger, A., Ball, H., Borden, K.L., Carlile, G.W., Prive, G.G. and Licht, J.D. 2000. In-depth mutational analysis of the promyelocytic leukemia zinc finger BTB/POZ domain reveals motifs and residues required for biological and transcriptional functions. Mol. Cell. Biol. 20: 6550-6567.

CHROMOSOMAL LOCATION

Genetic locus: ABTB2 (human) mapping to 11p13.

PRODUCT

ABTB2 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ABTB2 shRNA Plasmid (h): sc-96681-SH and ABTB2 shRNA (h) Lentiviral Particles: sc-96681-V as alternate gene silencing products.

For independent verification of ABTB2 (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-96681A, sc-96681B and sc-96681C.

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

ABTB2 siRNA (h) is recommended for the inhibition of ABTB2 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 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 ABTB2 gene expression knockdown using RT-PCR Primer: ABTB2 (h)-PR: sc-96681-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.