SANTA CRUZ BIOTECHNOLOGY, INC.

ASB-5 siRNA (m): sc-72557

BACKGROUND

ASB-5 (ankyrin repeat and SOCS box-containing 5), also known as ASB5, is a 329 amino acid protein belonging to the ankyrin repeat and SOCS (suppressor of cytokine signalling) box-containing family. ASB-5 contains six ANK repeats and one SOCS box domain, which ASB-5 utilizes for binding SOCS proteins and binding partners of the Elongin BC complex, an adapter module in E3 ubiquitin-protein ligase complexes. ASB-5 may function as a substrate-recognition component of an SCF-like ECS (Elongin-Cullin-SOCS-box protein) E3 ubiquitin-protein ligase complex, which regulates ubiquitination and subsequent proteasomal degradation of target proteins. ASB-5 may also play a role in arteriogenesis initiation. Conserved in chimpanzee, canine, bovine, mouse, rat, chicken and zebrafish, ARM-5 is encoded by a gene that maps to human chromosome 4q34.2.

REFERENCES

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2. Boengler, K., et al. 2003. The ankyrin repeat containing SOCS box protein 5: a novel protein associated with arteriogenesis. Biochem. Biophys. Res. Commun. 302: 17-22.
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5. Yoshioka, M., et al. 2006. Effects of dihydrotestosterone on skeletal muscle transcriptome in mice measured by serial analysis of gene expression. J. Mol. Endocrinol. 36: 247-259.
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7. Bateman, M.S., et al. 2010. A *de novo* 4q34 interstitial deletion of at least 9.3 Mb with no discernible phenotypic effect. Am. J. Med. Genet. A 152A: 1764-1769.
8. Tee, J.M. and Peppelenbosch, M.P. 2010. Anchoring skeletal muscle development and disease: the role of ankyrin repeat domain containing proteins in muscle physiology. Crit. Rev. Biochem. Mol. Biol. 45: 318-330.

CHROMOSOMAL LOCATION

Genetic locus: Asb5 (mouse) mapping to 8 B1.3.

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.

PRODUCT

ASB-5 siRNA (m) 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 ASB-5 shRNA Plasmid (m): sc-72557-SH and ASB-5 shRNA (m) Lentiviral Particles: sc-72557-V as alternate gene silencing products.

For independent verification of ASB-5 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-72557A, sc-72557B and sc-72557C.

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

ASB-5 siRNA (m) is recommended for the inhibition of ASB-5 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 ASB-5 gene expression knockdown using RT-PCR Primer: ASB-5 (m)-PR: sc-72557-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.