



ASB-5 siRNA (h): sc-72556

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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3. Seale, P., et al. 2004. Muscle satellite cell-specific genes identified by genetic profiling of MyoD-deficient myogenic cell. *Dev. Biol.* 275: 287-300.
4. Zhang, S.X., et al. 2005. Identification of direct serum-response factor gene targets during Me2SO-induced P19 cardiac cell differentiation. *J. Biol. Chem.* 280: 19115-19126.
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.
6. Garofalo, C.K., et al. 2007. *Escherichia coli* from urine of female patients with urinary tract infections is competent for intracellular bacterial community formation. *Infect. Immun.* 75: 52-60.
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CHROMOSOMAL LOCATION

Genetic locus: ASB5 (human) mapping to 4q34.2.

PRODUCT

ASB-5 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 ASB-5 shRNA Plasmid (h): sc-72556-SH and ASB-5 shRNA (h) Lentiviral Particles: sc-72556-V as alternate gene silencing products.

For independent verification of ASB-5 (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-72556A, sc-72556B and sc-72556C.

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

ASB-5 siRNA (h) is recommended for the inhibition of ASB-5 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.

GENE EXPRESSION MONITORING

ASB-5 (E-8): sc-518247 is recommended as a control antibody for monitoring of ASB-5 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor ASB-5 gene expression knockdown using RT-PCR Primer: ASB-5 (h)-PR: sc-72556-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.

PROTOCOLS

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