



STARS siRNA (m): sc-153880

BACKGROUND

STARS (striated muscle activator of Rho-dependent signaling), also known as ABRA (Actin-binding Rho-activating protein), is a 381 amino acid cytoplasmic protein. STARS localizes to the cytoskeleton, specifically, the I-band of the sarcomere and the sarcomeric structure between Z-lines, to a lesser extent. STARS is an activator of serum response factor (SRF)-dependent transcription, either by a mechanism requiring Rho-Actin signaling or inducing nuclear translocation of MRTF-A or MRTF-B. STARS has been found to interact with ABLIM1, ABLIM2, ABLIM3. The gene that encodes STARS maps to human chromosome 8, which is made up of nearly 146 million bases and encodes about 800 genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Abra (mouse) mapping to 15 B3.1.

PRODUCT

STARS 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see STARS shRNA Plasmid (m): sc-153880-SH and STARS shRNA (m) Lentiviral Particles: sc-153880-V as alternate gene silencing products.

For independent verification of STARS (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-153880A, sc-153880B and sc-153880C.

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

STARS siRNA (m) is recommended for the inhibition of STARS 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 STARS gene expression knockdown using RT-PCR Primer: STARS (m)-PR: sc-153880-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.