α_{1B} -AR siRNA (m): sc-39861



The Power to Question

BACKGROUND

 α_{1B} -adrenergic receptors couple to $G_{q/11}$ and induce neoplastic transformation in NIH/3T3 cell transfectants. α_{1B} receptors (α_{1B} -ARs) can form heterooligomers with α_{1A} and α_{1D} receptors. α_{1B} -AR transcripts are abundant in heart, brain, and kidney.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Adra1b (mouse) mapping to 11 B1.1.

PRODUCT

 $\alpha_{1B}\text{-AR}$ 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 $\alpha_{1B}\text{-AR}$ shRNA Plasmid (m): sc-39861-SH and $\alpha_{1B}\text{-AR}$ shRNA (m) Lentiviral Particles: sc-39861-V as alternate gene silencing products.

For independent verification of α_{1B} -AR (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-39861A, sc-39861B and sc-39861C.

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

 $\alpha_{1B}\text{-}AR$ siRNA (m) is recommended for the inhibition of $\alpha_{1B}\text{-}AR$ 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 α_{1B} -AR gene expression knockdown using RT-PCR Primer: α_{1B} -AR (m)-PR: sc-39861-PR (20 μ I). 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.

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