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SANTA CRUZ BIOTECHNOLOGY, INC.

FOXB2 siRNA (m): sc-145220

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The forkhead-box (FOX) genes comprise a superfamily of at least 43 members that encode proteins which are involved in transcriptional regulation and may be associated with the pathogenesis of various cancers. FOXB1 (forkhead box B1), also known as FKH5 or HFKH-5, and FOXB2 (forkhead box B2) are members of the FOX family and each contain one forkhead DNA-binding domain. Both FOXB1 and FOXB2 localize to the nucleus where they are thought to function as transcription factors that can bind to DNA via their forkhead domains. In mice, defects in the gene encoding FOXB1 are associated with retarded development of the central nervous system (CNS), suggesting that FOXB1 may play a role in CNS organization and function.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Foxb2 (mouse) mapping to 19 B.

PROTOCOLS

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

PRODUCT

FOXB2 siRNA (m) is a target-specific 19-25 nt siRNA 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 FOXB2 shRNA Plasmid (m): sc-145220-SH and FOXB2 shRNA (m) Lentiviral Particles: sc-145220-V as alternate gene silencing 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

FOXB2 siRNA (m) is recommended for the inhibition of FOXB2 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 FOXB2 gene expression knockdown using RT-PCR Primer: FOXB2 (m)-PR: sc-145220-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.