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PRHOXNB siRNA (m): sc-152463

BACKGROUND

PRHOXNB (parahox cluster neighbor), also known as URAD, putative 2-oxo-4-hydroxy-4-carboxy-5-ureidoimidazole decarboxylase or OHCU decarboxylase, is a 173 amino acid protein that localizes to peroxisome and belongs to the OHCU decarboxylase family. Encoded by a gene that maps to human chromosome 13q12.2, PRHOXNB participates in lyase and carboxy-lyase activities. PRHOXNB catalyzes the stereoselective decarboxylation of 2-oxo-4-hydroxy-4-carboxy-5-ureidoimidazole (OHCU) to (S)-allantoin. Highly conserved, PRHOXNB occurs in a single copy in innumerable organisms, although it is apparently not expressed. In primates, genes coding for enzymes linked to uric acid degradation were inactivated and converted to pseudogenes, suggesting that PRHOXNB could be the product of a pseudogene.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Urad (mouse) mapping to 5 G3.

PRODUCT

PRHOXNB 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PRHOXNB shRNA Plasmid (m): sc-152463-SH and PRHOXNB shRNA (m) Lentiviral Particles: sc-152463-V as alternate gene silencing products.

PROTOCOLS

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

PRHOXNB siRNA (m) is recommended for the inhibition of PRHOXNB 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 PRHOXNB gene expression knockdown using RT-PCR Primer: PRHOXNB (m)-PR: sc-152463-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.