

Pin4 siRNA (h): sc-90997

BACKGROUND

The peptidyl-prolyl *cis*-/*trans*-isomerase (PPlase) superfamily consists of three subfamilies, all of which contain proteins that are involved in the transport, folding and assembly of proteins. Pin4 (peptidyl-prolyl *cis*-*trans* isomerase NIMA-interacting 4), also known as EPVH, PAR14 (Parvulin 14) or PAR17, is a 131 amino acid member of the parvulin family, one of the three PPlase subfamilies. Expressed throughout the body with lowest expression levels in neuronal tissue, Pin4 contains one PPlase domain and is thought to function as a helper protein that catalytically mediates protein folding events within the cell. Additionally, Pin4 is able to bind DNA and, via this binding, may be involved in regulation of both chromatin remodeling and the cell cycle.

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CHROMOSOMAL LOCATION

Genetic locus: PIN4 (human) mapping to Xq13.1.

PRODUCT

Pin4 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 Pin4 shRNA Plasmid (h): sc-90997-SH and Pin4 shRNA (h) Lentiviral Particles: sc-90997-V as alternate gene silencing products.

For independent verification of Pin4 (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-90997A, sc-90997B and sc-90997C.

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

Pin4 siRNA (h) is recommended for the inhibition of Pin4 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Pin4 gene expression knockdown using RT-PCR Primer: Pin4 (h)-PR: sc-90997-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.