

PPWD1 siRNA (h): sc-91596

BACKGROUND

PPWD1 (peptidylprolyl isomerase domain and WD repeat containing 1), also known as spliceosome-associated cyclophilin, is a 646 amino acid protein that belongs to the cyclophilin-type PPlase family and the PP1L1 subfamily. PPWD1 is similar in structure to canonical CypA, as well as to CypH and PP1L1, two additional spliceosomal cyclophilins. PPWD1 contains one PPlase cyclophilin-type domain and four WD repeats. Localizing to nucleus, PPWD1 associates with spliceosomal complexes and operates as a subunit of the spliceosome C complex. Functioning as a putative peptidylprolyl isomerase, PPWD1 accelerates protein folding and catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides. PPWD1 may also play a role in pre-mRNA splicing. Highly conserved, PPWD1 is encoded by a gene that maps to human chromosome 5q12.3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PPWD1 (human) mapping to 5q12.3.

PROTOCOLS

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

PRODUCT

PPWD1 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 PPWD1 shRNA Plasmid (h): sc-91596-SH and PPWD1 shRNA (h) Lentiviral Particles: sc-91596-V as alternate gene silencing products.

For independent verification of PPWD1 (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-91596A, sc-91596B and sc-91596C.

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

PPWD1 siRNA (h) is recommended for the inhibition of PPWD1 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 PPWD1 gene expression knockdown using RT-PCR Primer: PPWD1 (h)-PR: sc-91596-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.