

# PPIL1 siRNA (m): sc-152409

## BACKGROUND

PPIL1 (peptidylprolyl isomerase (cyclophilin)-like 1), also known as CYPL1, PPIase, CGI-124 or hCyPX, is a member of the cyclophilin-type PPIase family of proteins. PPIL1 contains one PPIase cyclophilin-type domain and is ubiquitously expressed with predominant expression in skeletal muscle and heart. PPIL1 is a component of the 35 S U5 snRNP (small nuclear ribonucleoprotein) and is also recruited to the 45 S activated spliceosome by Skip (SNW1), a transcriptional coactivator. PPIL1 stably associates with Skip and may play a role in spliceosome activation, possibly functioning as a foldase or a molecular chaperone. In addition, PPIL1 interacts with Op18, a protein involved in microtubule stabilization, and may participate in cell proliferation. PPIL1 expression levels are elevated in cancer cells, further supporting a role for PPIL1 in proliferation and tumorigenesis.

## REFERENCES

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- Mann, S.S., et al. 1998. Reassignment of peptidyl prolyl isomerase-like 1 gene (PPIL1) to human chromosome region 6p21.1 by radiation hybrid mapping and fluorescence *in situ* hybridization. *Cytogenet. Cell Genet.* 83: 228-229.
- Skruzny, M., et al. 2001. Cyclophilins of a novel subfamily interact with SNW/SKIP coregulator in *Dictyostelium discoideum* and *Schizosaccharomyces pombe*. *Biochim. Biophys. Acta* 1521: 146-151.
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- Folk, P., et al. 2004. Transcriptional coregulator SNW/SKIP: the concealed tie of dissimilar pathways. *Cell. Mol. Life Sci.* 61: 629-640.
- Xu, C., et al. 2006. Solution structure of human peptidyl prolyl isomerase-like protein 1 and insights into its interaction with SKIP. *J. Biol. Chem.* 281: 15900-15908.
- Obama, K., et al. 2006. Overexpression of peptidyl-prolyl isomerase-like 1 is associated with the growth of colon cancer cells. *Clin. Cancer Res.* 12: 70-76.

## CHROMOSOMAL LOCATION

Genetic locus: Ppil1 (mouse) mapping to 17 A3.3.

## PRODUCT

PPIL1 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PPIL1 shRNA Plasmid (m): sc-152409-SH and PPIL1 shRNA (m) Lentiviral Particles: sc-152409-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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

PPIL1 siRNA (m) is recommended for the inhibition of PPIL1 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  $\mu$ M in 66  $\mu$ 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.

## GENE EXPRESSION MONITORING

PPIL1 (LB-72): sc-100701 is recommended as a control antibody for monitoring of PPIL1 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor PPIL1 gene expression knockdown using RT-PCR Primer: PPIL1 (m)-PR: sc-152409-PR (20  $\mu$ 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](http://www.scbt.com) for detailed protocols and support products.