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# PPIL6 siRNA (m): sc-152413

## BACKGROUND

PPIL6 (peptidylprolyl isomerase (cyclophilin)-like 6), also known as PPlase (peptidyl-prolyl *cis-trans* isomerase-like 6), cyclophilin-like protein PPIL6 or rotamase PPIL6, is a 311 amino acid protein that contains one PPlase cyclophilin-type domain and belongs to the cyclophilin-type PPlase family. Similar to other PPlases, PPIL6 accelerates the folding of proteins and catalyzes the *cis-trans* isomerization of proline imidic peptide bonds in oligopeptides. However, PPIL6, along with Cyp60 and SDCCAG-10, occur as a small set of human cyclophilins that are unable to bind cyclosporin and tetrapeptide, and are divergent from other family members in terms of *in vitro* activity. Encoded by a gene that maps to human chromosome 6q21, PPIL6 is 38% identical to RSP12, another cyclophilin-type PPlase family member, which in addition to protein folding, may function as a regulatory protein. PPIL6 is a proposed candidate gene for prostate cancer progression.

## REFERENCES

1. Nishiu, M., Tomita, Y., Nakatsuka, S., Takakuwa, T., Iizuka, N., Hoshida, Y., Ikeda, J., Iuchi, K., Yanagawa, R., Nakamura, Y. and Aozasa, K. 2004. Distinct pattern of gene expression in pyothorax-associated lymphoma (PAL), a lymphoma developing in long-standing inflammation. *Cancer Sci.* 95: 828-834.
2. Nebert, D.W., Sophos, N.A., Vasiliou, V. and Nelson, D.R. 2004. Cyclophilin nomenclature problems, or, "a visit from the sequence police". *Hum. Genomics* 1: 381-388.
3. Galat, A. 2004. Function-dependent clustering of orthologues and paralogues of cyclophilins. *Proteins* 56: 808-820.
4. Yang, P., Diener, D.R., Yang, C., Kohno, T., Pazour, G.J., Dienes, J.M., Agrin, N.S., King, S.M., Sale, W.S., Kamiya, R., Rosenbaum, J.L. and Witman, G.B. 2006. Radial spoke proteins of *Chlamydomonas* flagella. *J. Cell Sci.* 119: 1165-1174.
5. Kim, J.H., Dhanasekaran, S.M., Mehra, R., Tomlins, S.A., Gu, W., Yu, J., Kumar-Sinha, C., Cao, X., Dash, A., Wang, L., Ghosh, D., Shedden, K., Montie, J.E., Rubin, M.A., Pienta, K.J., Shah, R.B. and Chinnaiyan, A.M. 2007. Integrative analysis of genomic aberrations associated with prostate cancer progression. *Cancer Res.* 67: 8229-8239.
6. Birk, E., Har-Zahav, A., Manzini, C.M., Pasmanik-Chor, M., Kornreich, L., Walsh, C.A., Noben-Trauth, K., Albin, A., Simon, A.J., Colleaux, L., Morad, Y., Rainshtein, L., Tischfield, D.J., Wang, P., Magal, N., Maya, I., et al. 2010. SOBP is mutated in syndromic and nonsyndromic intellectual disability and is highly expressed in the brain limbic system. *Am. J. Hum. Genet.* 87: 694-700.
7. Davis, T.L., Walker, J.R., Campagna-Slater, V., Finerty, P.J., Paramanathan, R., Bernstein, G., MacKenzie, F., Tempel, W., Ouyang, H., Lee, W.H., Eisenmesser, E.Z. and Dhe-Paganon, S. 2010. Structural and biochemical characterization of the human cyclophilin family of peptidyl-prolyl isomerases. *PLoS Biol.* 8: e1000439.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## CHROMOSOMAL LOCATION

Genetic locus: Ppil6 (mouse) mapping to 10 B2.

## PRODUCT

PPIL6 siRNA (m) 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PPIL6 shRNA Plasmid (m): sc-152413-SH and PPIL6 shRNA (m) Lentiviral Particles: sc-152413-V as alternate gene silencing products.

For independent verification of PPIL6 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-152413A, sc-152413B and sc-152413C.

## 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

PPIL6 siRNA (m) is recommended for the inhibition of PPIL6 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.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor PPIL6 gene expression knockdown using RT-PCR Primer: PPIL6 (m)-PR: sc-152413-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.