

# PPIL1 (LB-72): sc-100701

## BACKGROUND

PPIL1 (peptidyl-prolyl isomerase (cyclophilin)-like 1), also known as CYPL1, PPlase, CGI-124 or hCyPX, is a member of the cyclophilin-type PPlase family of proteins. PPIL1 contains one PPlase cyclophilin-type domain and is ubiquitously expressed with predominant expression in skeletal muscle and heart. PPIL1 is a component of the 35S U5 snRNP (small nuclear ribonucleoprotein) and is also recruited to the 45S activated spliceosome by Skip (SNW1), a transcriptional co-activator. 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

- Ozaki, K., Fujiwara, T., Kawai, A., Shimizu, F., Takami, S., Okuno, S., Takeda, S., Shimada, Y., Nagata, M., Watanabe, T., Takaichi, A., Takahashi, E., Nakamura, Y. and Shin, S. 1996. Cloning, expression and chromosomal mapping of a novel cyclophilin-related gene (PPIL1) from human fetal brain. *Cytogenet. Cell Genet.* 72: 242-245.
- Mann, S.S., Pettenati, M.J., von Kap-herr, C. and Hart, T.C. 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., Ambrozikova, M., Fukova, I., Martinkova, K., Blahuskova, A., Hamplova, L., Puta, F. and Folk, P. 2001. Cyclophilins of a novel subfamily interact with SNW/Skip coregulator in *Dictyostelium discoideum* and *Schizosaccharomyces pombe*. *Biochim. Biophys. Acta* 1521: 146-151.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 601301. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Folk, P., Puta, F. and Skruzny, M. 2004. Transcriptional coregulator SNW/Skip: the concealed tie of dissimilar pathways. *Cell. Mol. Life Sci.* 61: 629-640.
- Xu, C., Zhang, J., Huang, X., Sun, J., Xu, Y., Tang, Y., Wu, J., Shi, Y., Huang, Q. and Zhang, Q. 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., Kato, T., Hasegawa, S., Satoh, S., Nakamura, Y. and Furukawa, Y. 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 (human) mapping to 6p21.2; Ppil1 (mouse) mapping to 17 A3.3.

## SOURCE

PPIL1 (LB-72) is a mouse monoclonal antibody raised against recombinant PPIL1 of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

PPIL1 (LB-72) is recommended for detection of PPIL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PPIL1 siRNA (h): sc-95262, PPIL1 siRNA (m): sc-152409, PPIL1 shRNA Plasmid (h): sc-95262-SH, PPIL1 shRNA Plasmid (m): sc-152409-SH, PPIL1 shRNA (h) Lentiviral Particles: sc-95262-V and PPIL1 shRNA (m) Lentiviral Particles: sc-152409-V.

Molecular Weight of PPIL1: 18 kDa.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## 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.