

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

1. Ozaki, K., et al. 1996. Cloning, expression and chromosomal mapping of a novel cyclophilin-related gene (PPIL1) from human fetal brain. *Cytogenet. Cell Genet.* 72: 242-245.
2. 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.
3. 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.
4. 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/>
5. Folk, P., et al. 2004. Transcriptional coregulator SNW/ Skip: the concealed tie of dissimilar pathways. *Cell. Mol. Life Sci.* 61: 629-640.
6. 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.
7. 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 (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_{2a} 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.

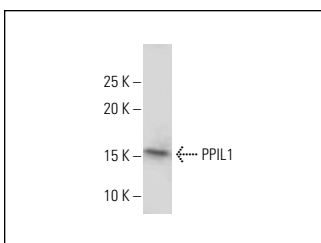
Molecular Weight of PPIL1: 18 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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).

DATA



PPIL1 (LB-72): sc-100701. Western blot analysis of PPIL1 expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

1. Jannah, A.H., et al. 2022. Crosstalk between pro-survival sphingolipid metabolism and complement signaling induces inflammasome-mediated tumor metastasis. *Cell Rep.* 41: 111742.

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 for detailed protocols and support products.