

PPIL4 (73K-7): sc-100702

BACKGROUND

Cyclophilins are conserved, ubiquitous and abundant cytosolic peptidylprolyl *cis-trans* isomerases that accelerate the isomerization of XaaPro peptide bonds and the refolding of proteins. PPIL4 (peptidylprolyl isomerase (cyclophilin)-like 4), also known as HDCME13P, is a 492 amino acid, evolutionarily conserved member of the cyclophilin-type PPIase family of proteins. Ubiquitously expressed with predominant expression in kidney, PPIL4 localizes to the nucleus and contains one PPIase cyclophilin-type domain, a lysine-rich domain, a pair of bipartite nuclear targeting sequences and one RRM (RNA recognition motif) domain. The presence of the RRM domain along with nuclear targeting sequences suggests that PPIL4 may be involved in transcriptional regulation.

REFERENCES

- Gardiner, K., Weissman, S. and Werner, T. 2001. Report on the Eleventh International Workshop on the Identification of Transcribed Sequences. Washington, DC, USA Cytogenet. Cell Genet. 95: 1-8.
- Zeng, L., Zhou, Z., Xu, J., Zhao, W., Wang, W., Huang, Y., Cheng, C., Xu, M., Xie, Y. and Mao, Y. 2001. Molecular cloning, structure and expression of a novel nuclear RNA-binding cyclophilin-like gene (PPIL4) from human fetal brain. Cytogenet. Cell Genet. 95: 43-47.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607609. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Nebert, D.W., Sophos, N.A., Vasilioi, V. and Nelson, D.R. 2004. Cyclophilin nomenclature problems, or, "a visit from the sequence police". Hum. Genomics 1: 381-388.
- Valle, C., Troiani, A.R., Lazzaretti, P., Bouvier, J., Cioli, D. and Klinkert, M.Q. 2005. Molecular and biochemical characterization of a protein cyclophilin from the nematode *Haemonchus contortus*^P. Parasitol. Res. 96: 199-205.

CHROMOSOMAL LOCATION

Genetic locus: PPIL4 (human) mapping to 6q25.1.

SOURCE

PPIL4 (73K-7) is a mouse monoclonal antibody raised against recombinant PPIL4 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.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

PPIL4 (73K-7) is recommended for detection of PPIL4 of 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PPIL4 siRNA (h): sc-95191, PPIL4 shRNA Plasmid (h): sc-95191-SH and PPIL4 shRNA (h) Lentiviral Particles: sc-95191-V.

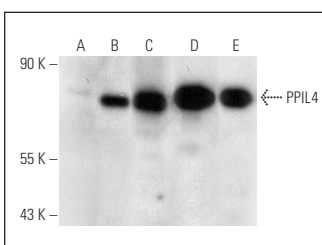
Molecular Weight of PPIL4: 57 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, NTERA-2 cl.D1 whole cell lysate: sc-364181 or PPIL4 (h): 293 Lysate: sc-112931.

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, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



PPIL4 (73K-7): sc-100702. Western blot analysis of PPIL4 expression in non-transfected 293T: sc-117752 (A), human PPIL4 transfected 293T: sc-369614 (B), NTERA-2 cl.D1 (C) and K-562 (D) whole cell lysates and HeLa nuclear extract (E).

RESEARCH USE

For research use only, not for use in diagnostic procedures.