

PPIL4 (N-13): sc-169002

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 PPlase family of proteins. Ubiquitously expressed with predominant expression in kidney, PPIL4 localizes to the nucleus and contains one PPlase 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

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- Gardiner, K., et al. 2001. Report on the eleventh international workshop on the identification of transcribed sequences 2001. November 9-11, 2001. Washington, DC, USA *Cytogenet. Cell Genet.* 95: 1-8.
- 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., et al. 2004. Cyclophilin nomenclature problems, or, "a visit from the sequence police". *Hum. Genomics* 1: 381-388.
- Valle, C., et al. 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; Ppil4 (mouse) mapping to 10 A1.

SOURCE

PPIL4 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PPIL4 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169002 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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 or our catalog for detailed protocols and support products.

APPLICATIONS

PPIL4 (N-13) is recommended for detection of PPIL4 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)], 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); non cross-reactive with other PPIL family members.

PPIL4 (N-13) is also recommended for detection of PPIL4 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for PPIL4 siRNA (h): sc-95191, PPIL4 siRNA (m): sc-152411, PPIL4 shRNA Plasmid (h): sc-95191-SH, PPIL4 shRNA Plasmid (m): sc-152411-SH, PPIL4 shRNA (h) Lentiviral Particles: sc-95191-V and PPIL4 shRNA (m) Lentiviral Particles: sc-152411-V.

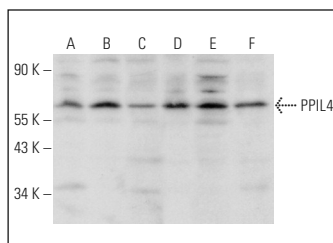
Molecular Weight of PPIL4: 57 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, U-698-M whole cell lysate: sc-364799 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PPIL4 (N-13): sc-169002. Western blot analysis of PPIL4 expression in HeLa nuclear extract (A), NTERA-2 cl.D1 (B), HEK293 (C) and U-698-M (D) whole cell lysates and mouse kidney (E) and mouse liver (F) tissue extracts.

RESEARCH USE

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