

# PPIH (G-6): sc-377420

## BACKGROUND

PPIH (peptidylprolyl isomerase H (Cyclophilin H)), also known as PPlase H, Rotamase H, CypH, CYP20 or USA-CYP (U-snRNP-associated cyclophilin SnuCyp-20), is a 177 amino acid protein that belongs to the cyclophilin-type PPlase family. PPIH may accelerate the folding of proteins and catalyzes the *cis-trans* isomerization of proline imidic peptide bonds in oligopeptides. PPIH is thought to participate in pre-mRNA splicing with processing factors PRPF3, PRPF4 and PRPF18 and may be involved in the assembly of the U4/U5/U6 tri-snRNP complex. Considered a protein chaperone, PPIH possesses PPlase activity and mediates the interactions between different proteins inside the spliceosome. PPIH contains one PPlase cyclophilin-type domain and is inhibited by Cyclosporin A.

## REFERENCES

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3. Horowitz, D.S., et al. 1997. A new cyclophilin and the human homologues of yeast Prp3 and Prp4 form a complex associated with U4/U6 snRNPs. *RNA* 3: 1374-1387.
4. Teigelkamp, S., et al. 1998. The 20kD protein of human [U4/U6.U5] tri-snRNPs is a novel cyclophilin that forms a complex with the U4/U6-specific 60kD and 90kD proteins. *RNA* 4: 127-141.
5. Reidt, U., et al. 2003. Crystal structure of a complex between human spliceosomal cyclophilin H and a U4/U6 snRNP-60K peptide. *J. Mol. Biol.* 331: 45-56.
6. Ingelfinger, D., et al. 2003. Two protein-protein interaction sites on the spliceosome-associated human cyclophilin CypH. *Nucleic Acids Res.* 31: 4791-4796.
7. Galat, A. 2004. Function-dependent clustering of orthologues and paralogues of cyclophilins. *Proteins* 56: 808-820.
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## CHROMOSOMAL LOCATION

Genetic locus: PPIH (human) mapping to 1p34.2; Ppih (mouse) mapping to 4 D2.1.

## SOURCE

PPIH (G-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 151-174 at the C-terminus of PPIH of human origin.

## PRODUCT

Each vial contains 200 µg IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-377420 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-377420 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

PPIH (G-6) is recommended for detection of PPIH of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

PPIH (G-6) is also recommended for detection of PPIH in additional species, including equine, canine, bovine, porcine and avian.

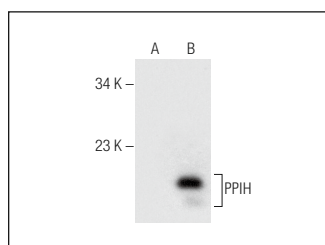
Suitable for use as control antibody for PPIH siRNA (h): sc-76207, PPIH siRNA (m): sc-76208, PPIH shRNA Plasmid (h): sc-76207-SH, PPIH shRNA Plasmid (m): sc-76208-SH, PPIH shRNA (h) Lentiviral Particles: sc-76207-V and PPIH shRNA (m) Lentiviral Particles: sc-76208-V.

PPIH (G-6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

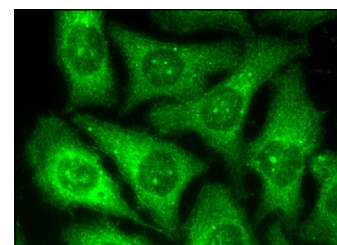
Molecular Weight of PPIH: 20 kDa.

Positive Controls: PPIH (m): 293T Lysate: sc-125851.

## DATA



PPIH (G-6): sc-377420. Western blot analysis of PPIH expression in non-transfected: sc-117752 (A) and mouse PPIH transfected: sc-125851 (B) 293T whole cell lysates.



PPIH (G-6): sc-377420. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

## 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.