# PPIH (N-13): sc-79699



The Power to Question

# **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**

- 1. Chambraud, B., Rouvière-Fourmy, N., Radanyi, C., Hsiao, K., Peattie, D.A., Livingston, D.J. and Baulieu, E.E. 1993. Overexpression of p59-HBI (FKBP59), full length and domains, and characterization of PPlase activity. Biochem. Biophys. Res. Commun. 196: 160-166.
- Schmidt, B., Tradler, T., Rahfeld, J.U., Ludwig, B., Jain, B., Mann, K., Rücknagel, K.P., Janowski, B., Schierhorn, A., Küllertz, G., Hacker, J. and Fischer, G. 1996. A cyclophilin-like peptidyl-prolyl cis/trans isomerase from Legionella pneumophila—characterization, molecular cloning and overexpression. Mol. Microbiol. 21: 1147-1160.
- 3. Horowitz, D.S., Kobayashi, R. and Krainer, A.R. 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.
- Teigelkamp, S., Achsel, T., Mundt, C., Göthel, S.F., Cronshagen, U., Lane, W.S., Marahiel, M. and Lührmann, R. 1998. The 20 kD protein of human [U4/U6.U5] tri-snRNPs is a novel cyclophilin that forms a complex with the U4/U6-specific 60 kD and 90 kD proteins. RNA 4: 127-141.
- Reidt, U., Wahl, M.C., Fasshauer, D., Horowitz, D.S., Lührmann, R. and Ficner, R. 2003. Crystal structure of a complex between human spliceosomal Cyclophilin H and a U4/U6 snRNP-60 K peptide. J. Mol. Biol. 331: 45-56.

#### CHROMOSOMAL LOCATION

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

# **SOURCE**

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

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79699 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-79699 X, 200  $\mu g/0.1$  ml.

#### **APPLICATIONS**

PPIH (N-13) is recommended for detection of PPIH of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 (N-13) is also recommended for detection of PPIH in additional species, including equine, canine, bovine and porcine.

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 (N-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of PPIH: 20 kDa.

# **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) 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.

# **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 or our catalog for detailed protocols and support products.



Try **PPIH (C-1):** sc-377217 or **PPIH (C-5):** sc-390798, our highly recommended monoclonal alternatives to PPIH (N-13).

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